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General Literature.

Middlemarch. A Study of Provincial Life. By George Eliot. Blackwood.

CONTEMPORARY criticism of great works is apt to prove unsatisfactory, for even when their greatness is recognised at once, the critic labours under a double disadvantage: an unwonted sense of responsibility restrains the free expression of unmotivated admiration, and the easy volubility of praise, which is enough for slighter merits, makes way for a guarded tone of respect that looks like coldness on the surface. Nor is this all; for the vocabulary of positive eulogium is soon exhausted; criticism to be significant must be comparative, and there is an obvious difficulty in estimating by old-established standards of excellence a new work that may contain within itself a fresh standard for the guidance and imitation of futurity. For the theory of art is after all only a patchwork of inference from the practice of artists, and, to quit generalities, in one clearly defined and admirable branch of imaginative art—the English novel—our ideal is simply one or other of the masterpieces of one or other of the great novelists between Fielding and George Eliot. *Tom Jones*, *Clarissa Harlowe*, *Waverley*, *Pride and Prejudice*, *Vanity Fair*, *Adam Bede*—to which some might wish to add *Eugene Aram*, *Pickwick*, and *Jane Eyre*—are the sources from whence all theories of the novel, as a prose narrative representation of manners, character and passion, ultimately derive. In truth, variety and intensity, the best of these works left something to be supplied by excellence of a different type: there are stronger as well as more complex passions than Fielding has drawn; Richardson's subtlety works in a narrow field; Miss Austen's knowledge of the world was scanty, and Thackeray's theory of human nature one-sided, while on the other hand it might be argued that an over-systematic plot or too thrilling situations give a *prima facie* look of unreality to scenes of modern life. No one of course makes it a ground of complaint against these authors that they failed to combine incompatible perfections, but a reference to the natural limitations of the styles in which they severally succeeded may help to show what space was left for a fresh combination of the old ingredients.

Middlemarch marks an epoch in the history of fiction in
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so far as its incidents are taken from the inner life, as the action is developed by the direct influence of mind on mind and character on character, as the material circumstances of the outer world are made subordinate and accessory to the artistic presentation of a definite passage of mental experience, but chiefly as giving a background of perfect realistic truth to a profoundly imaginative psychological study. The effect is as new as if we could suppose a *Wilhelm Meister* written by Balzac. In *Silas Marner*, *Romola*, and the author's other works there is the same power, but it does not so completely and exclusively determine the form in which the conception is placed before us. In *Silas Marner* there is a natural and obvious unity in the life of the weaver, but in *Romola*—where alone the interest is at once as varied and as profound as in *Middlemarch*—though the historic glories of Florence, the passions belonging to what, as compared with the nineteenth century, is an heroic age, are in perfect harmony with the grand manner of treating spiritual problems, yet the realism, the positive background of fact, which we can scarcely better bear to miss, has necessarily some of the character of an hypothesis, and does not inspire us with the same confidence as truths we can verify for ourselves. For that reason alone, on the mere point of artistic harmony of construction, we should rate the last work as the greatest; and to say that *Middlemarch* is George Eliot's greatest work is to say that it has scarcely a superior and very few equals in the whole wide range of English fiction.

As "a study of provincial life," if it were nothing more, *Middlemarch* would have a lasting charm for students of human nature in its less ephemeral costumes; besides the crowds of men and women whom we have all known in real life, where, however, to our dimmer vision, they seemed less real and life-like than in the book, the relations between the different clusters, the proportions in which the different elements mix, the points of contact and the degree of isolation in the different ranks; the contented coexistence of town and county, the channels of communication between the two always open and yet so rarely used, the effect of class distinctions in varying the mental horizon and obliging the most matter-of-fact observer to see a few things in perspective,—all the subtle factors which make up the character of a definite state of society are given with inimitable accuracy and fulness of insight. The picture in its main outlines is as true of the England of to-day or the England

of a hundred years ago as of the England of the Reform agitation. The world as we know it has its wise and good, its fools and hypocrites scattered up and down a neutral-tinted mass in much the same proportion as at Middlemarch. The only difference is that they are not so plainly recognisable, and this is perhaps the reason that a first perusal of the book seems to have an almost oppressive effect on ordinary readers, somewhat as little children are frightened at a live automaton toy. It is not natural to most men to know so much of their fellow-creatures as George Eliot shows them, to penetrate behind the scenes in so many homes, to understand the motives of ambiguous conduct, to watch "like gods knowing good and evil" the tangled course of intermingled lives, the remote mainsprings of impulse and the wide-eddy effects of action. Even with the author's assistance it is not easy to maintain the same height of observant wisdom for long, and since the intricacy of the subject is real, a feeling of even painful bewilderment in its contemplation is not entirely unbecoming.

But the complicated conditions of so seemingly simple a thing as provincial life are not the main subject of the work. The busy idleness of Middlemarch, its trade, its politics, its vestry meetings, and its neighbouring magnates, only form the background of relief to two or three spiritual conflicts, the scenery amongst which two or three souls spend some eventful years in working out their own salvation and their neighbours', or in effecting, with equal labour, something less than salvation for both. The story of these conflicts and struggles is the thread which unites the whole, and sympathy with its incidents is the force that reconciles the reader to the unwonted strain upon his intellectual faculties already noticed; and to the yet further effort necessary to recognise the fact that the real and the ideal sides of our common nature do coexist in just such relations, and with just such proportionate force as the author reveals. For, without this admission, it is impossible to appreciate the full literary and artistic perfection of the work as a whole; some readers may delight spontaneously in the author's moral earnestness, and only admire her satirical insight, while others delight in her satire and coldly admit the excellence of the moral purpose; but the two are only opposite aspects of the same large theory of the universe, which is at once so charitable and so melancholy that it would be fairly intolerable (although true) without the sauce of an unsparing humour.

Middlemarch is the story of two rather sad fatalities, of two lives which, starting with more than ordinary promise, had to rest content with very ordinary achievement, and could not derive unmixed consolation from the knowledge, which was the chief prize of their struggles, that failure is never altogether undeserved. One of the original mottoes to the first book gives the clue to what follows:

"1st Gent. Our deeds are fetters that we forge ourselves.
2nd Gent. Ay, truly; but I think it is the world
That brings the iron:"

but as the action proceeds a further consciousness gathers shape: "It always remains true that if we had been greater, circumstances would have been less strong against us," which is still more simply expressed in Dorothea's "feeling that there was always something better which she might have done, if she had only been better and known better." The two failures, however, have little in common but their irrevocable necessity. From one point of view, Dorothea's is the most tragical, for the fault in her case seems to be altogether in the nature and constitution of the universe; her devotion and purity of intention are altogether beautiful, even when, for lack of knowledge, they are expended in what seems to be the wrong place, but it is a sad reflection that

their beauty must always rest on a basis of illusion because there is no right place for their bestowal. Except in the chapter of her marriages Dorothea is a perfect woman, but for a perfect woman any marriage is a *mésalliance*, and as such, "certainly those determining acts of her life were not ideally beautiful." But we can as little tell as the Middlemarchers "what else that was in her power she ought rather to have done." If she had had no illusions she might have been a useful Lady Bountiful, managing her own affairs like Goethe's Theresa, a personage who inspires but mediocre interest, and might have married Mrs. Cadwallader's philanthropic Lord Triton without suspicion of *mésalliance*: but then she would not have been Dorothea, not the impetuous young woman with "a heart large enough for the Virgin Mary," whose sighs, when she thinks her lover is untrue, are breathed for "all the troubles of all the people on the face of the earth." The world must be ugly for her power of seeing it as it is not to be beautiful, just as men's lives must be sad and miserable to call for the exercise of her infinite charity. Still the illusions are sweet and the charity beneficent, and since women like Dorothea are content to live only for others, life may offer occasions enough for self-sacrifice to compensate them for the natural impossibility of shaping an ideally perfect course through the multitudinous imperfections of real existence. It would be ungenerous to accept such a fate for them without reluctance, and therefore some sadness must always mix with our thoughts of the historic and unhistoric Dorotheas of the world; but it is also true that the moral force exercised by such characters can no more be wasted than any physical impulse, and that, without the disinterested virtue of the few, the conflicting appetites of a world of Rosamonds would make life impossible. To keep society alive is perhaps a worthier mission than to cheer the declining years of Mr. Casaubon; but to do more than keep it alive, to make it a fit home for future Dorotheas, the present supply of such missionaries would have to be increased; and they are born, not made. Perhaps the strongest example of the author's instinctive truthfulness is that she never loses sight of the limits to the exercise of the power which she represents so vividly and values so highly. A life's growth of empty egotism like Mr. Casaubon's cannot be melted in a year of marriage, even to Dorothea; with a generous example close before her, Rosamond can be almost honest for once at little expense, but she can no more change her character than her complexion or the colour of her eyes, or than she can unmake the whole series of circumstances which have made her life less negatively innocent than Celia's. A little more selfishness, a little more obstinacy, a little less good fortune, and especially life in a just lower moral atmosphere, make all the difference between a pretty, prosaic, kittenish wife and a kind of well-conducted domestic vampire. It is by such contrasts as these that George Eliot contrives to preach tolerance even while showing with grim distinctness the ineffaceableness of moral distinctions and the unrelenting force of moral obligations. If virtue is a matter of capacity, defect only calls for pity; but defects which we do not venture to blame may be none the less fatal to the higher life, while the smallest shoot of virtue, if the heavens and earth chance to be propitious to its growth, may spread into a stately tree.

Such at least is the inference suggested by another contrast, that between Lydgate and Fred, for though marriage appears the "determining act" in their lives also, it is itself determined by certain essential points of character and disposition. Fred's honest boyish affection for a girl who is a great deal too good for him brings its own reward, as that kind of virtue often will; there was enough self-abandonment

in it to deserve a generous answer, and in the long-run people generally get their deserts. The failure of Lydgate's intellectual aspirations, as the consequence of a marriage contracted altogether at the bidding of his lower nature, is of course much more elaborately treated than Fred's simple "love-problem." Unlike most of the other characters, Lydgate does not become thoroughly intelligible till the last number of the work has been read in connection with the first: then he appears as a masculine counterpart to Dorothea with the relative proportions of head and heart reversed. But while it was abstractedly impossible for Dorothea to be altogether wise, without detriment to the peculiar and charming character of her goodness, there was nothing but concrete human infirmity to prevent Lydgate from combining the mind of Bichat and the morals of Fred Vincy. Instead of such a compound the actual and very human Lydgate is one of those men whose lives are cut in two, whose intellectual interests have no direct connection with their material selves, and who only discover the impossibility of living according to habit or tradition when brought by accident or their own heedlessness face to face with difficulties that require thought as well as resolution. There was not room in the life he contemplated for a soul much larger than Rosamond's, and it may be doubted whether the Rosamond he wished for would not, by a merely passive influence, have been as obstructive to his wide speculations, for he was just, though not expansive, and the duties entailed by one act of weakness may multiply and branch as much as if they were of a valuable stock. On the other hand, if the scientific ardour had been more absorbing, he might have gone on his own way, crushing all poor Rosamond's little schemes of opposition, and then she would have been the victim instead of the oppressor, but his character would have been as far from ideal excellence as before. The interest culminates when Lydgate, entangled with the consequences of his own and other people's wrongdoing, finds in Dorothea the beneficent influence that spends itself in setting straight whatever is not constitutionally crooked, but he has also of course found out by then that the events which led him to cross her path were the same that had proved fatal to his aspirations; the enlarged sympathies were gathered during the process that paralysed his original activity. The story of a man "who has not done what he once meant to do" has always a strong element of pathos, but when what he meant to do was not in itself impossible, like the realization of Dorothea's visions, there remains a twofold consolation; if possible in itself, and yet not done as proposed, it must have been impossible to the proposer, and therefore his failure is free from blame, while disappointment of his hopes, though painful, cannot be regarded as an unmitigated evil, since such fallen aspirations as Lydgate's are still something it is better to have had than to be altogether without. Natural fatality and the logic of facts are made to persuade us that all regrets are impractical except the most impractical of all—"if we had only known better and been better"—but the first step towards solving a problem is to state it; and one of the many merits of *Middlemarch* is that it shows the inadequacy of all other less arduous short cuts to the reformation of society. Ordinary mortals who are not fatalists have no excuse for calling a book sad which makes the redress of every one's wrongs rest in the last resort with themselves; while people whose idea of the world is already as gloomy as it well can be, cannot fail to derive some consolation from the thought that George Eliot's wider knowledge and juster perceptions find here and there a little to admire as well as much everywhere to laugh at.

There is no occasion to dwell in detail on the story which every one has read. The studies of Casaubon and Bulstrode

would each furnish matter for an ordinary review, though here we have treated them as altogether secondary to the development of the two principal characters. Besides their more direct influence on the action, both serve, with old Featherstone, to illustrate the blindness of selfish calculation. Bulstrode is none the better either for his manslaughter or for his attempt at restitution. If Mr. Casaubon's will had not drawn Dorothea and Ladislaw together, something else would; for the moral forces at work in any direction can only be arrested by other forces of the same kind, while no moral jugglery will ward off the material effects of causes set to work long before. By way of relief from such troublesome spectacles, the Garth household is invaluable, with its common-sense happiness not corrupted by an undue contempt for "notions." The choruses of slightly belated popular wisdom, the Featherstone family, Mrs. Dollop's clients, the Middlemarch tea-parties, the dowager Lady Chettam's society, appear from time to time to comment with their usual insight and *à propos* on the doings of their betters. But it is perhaps a mistake to suppose the intention of this class of character to be altogether satirical. The author spends too much invention upon them for them to be quite so stupid as they look. The minds of Mrs. Waule and sister Martha, as of Mrs. Holt and the Tulliver connection move erratically, but their reasoning is often so imaginative that it would be scarcely a compliment to suggest that they only represent, as choruses should, the opinions of the inspired *vox populi* in the process of making: they are an idealization rather than a caricature of the popular sense.

In a work that has scarcely a quality which is not a merit, it is hard to determine what points to leave unnoticed. The gift, shared only, amongst contemporaries by Mr. Browning, of choosing similes and illustrations that do really illustrate the nature of the things compared, is exercised, if anything, more freely than in the author's other works; but her style, always polished and direct, seems to have become still more sharply condensed; the dialogues, always natural, still more simple in their force. This is especially true of the scenes in the last book, where Dorothea probably uses fewer and plainer words than have ever served to express deep feeling before. Mastery like this is the best title to immortality, and posterity will only do the present generation justice if it believes that real emotion speaks so now, if it speaks at all, though in real life it more commonly observes an awkward silence. Many of the less serious conversations have the same classical perfection of finish; one, for instance, between Mary Garth and Rosamond, near the end of part i., will show to those curious in such matters better than all Mr. Trollope's voluminous works, how girls in the nineteenth century discuss the matters in which they are privately interested. The family circle of the Vincys in the chapter before is scarcely inferior, and though we only see in it now a singularly faithful sketch from nature, there can be little doubt of its outliving the nature it represents. It is a little curious that Mr. Brooke, who represents a type, should seem, according to the general experience, to be a commoner acquaintance than Sir James Chettam, who represents a class, which we should be loth to think threatened with extinction. Both are friends of whom one does not soon weary of telling, but if we had indefinite space at command it would be better spent in quoting their sayings or the author's own epigrams. Failing this resource, we can only return to the point from whence we started, the natural incapacity of criticism (or critics—"the people who have failed in literature and art") to throw much light upon a work like *Middlemarch*. All critics are not like Mr. Borthrop Trumbull, who "was an admirer by nature, and would have liked to have the universe under

his hammer, feeling that it would go at a higher figure for his recommendation." On the contrary, we hold that an auctioneer's catalogue of the divers and sundry beauties, rarities, and profundities of these admirable volumes, can add nothing to the impression which a leisurely perusal (let no one read them in haste) will leave on the mind of every man and woman whose mental and artistic perceptions are sound and unblunted. And if praise is unnecessary, it is impertinent. Spontaneous admiration is one of the few pleasures of life, but the spurious literary enthusiasm which has to be conjured up with a bedè roll of respected adjectives is a caricature of the true feeling. In fact, for the moment, we are of Sir James Chettam's mind. He has just said: "I don't *like* Casaubon." (Can anything be more conclusive? if he had said: "I *like* Middelmarch!") "He did not usually find it easy to give his reasons; it seemed to him strange that people should not know them without being told, since he only felt what was reasonable." Except by the amiable baronet, reasons for *disliking* a person—or a book—are easily found; but the best reason for an admiration of *Middelmarch* is—the book itself.

H. LAWRENNY.

The Red Flag, and other Poems. By the Hon. Roden Noel, Author of *Beatrice*, and other Poems. Strahan and Co.

MR. NOEL'S new volume of poems marks a decided advance both in clearness of form and in melody of expression upon his earlier collection, *Beatrice*. He has succeeded in working out more unity of style, in harmonizing his thought and feeling, and in producing more sustained effects of music in verse, without sacrificing individuality. The poems which are contained in the book before us may be roughly classified under the following heads:—(i.) Social and Political, including the satire which gives its name to the volume, the long series of studies entitled "War," which deal with the events of the Prussian-French campaign, and the exquisite little lyric called "The Children's Grass." (ii.) Domestic or Personal, to which belong "A Christian's Funeral," "Life and Death," and one or two pieces of minor importance. (iii.) Landscapes; to this section may be referred the most completely successful and characteristic poems of the whole collection, particularly "Palingenesis," "Richmond Hill," "A Sea Symphony," "A Vision of the Desert," in all of which Mr. Noel displays his peculiar faculty of infusing philosophic reflection into his descriptions of nature, of painting with the most loving minuteness, and at the same time of irradiating the whole of his picture with human emotion or with deep religious feeling. (iv.) Descriptive pieces, which owe their charm to an intensity of passionate sympathy: of this class the most remarkable are "Azrael," "The Water Nymph and the Boy," and "The Dweller in Two Worlds." (v.) Songs, among which "Eric," "Was it Well?" "Early Spring" are perhaps most noticeable. This classification, which, by the way, is not based upon the order or grouping of the poems in the volume, for they are all printed as miscellaneous, may be useful as indicating briefly the range of subjects over which the author travels. It is probably upon the compositions of the third and fourth sections that the reputation of Mr. Noel as a poet of marked originality will ultimately rest.

The piece which gives its title to the book, is a satire on the hollowness of our vaunted social security. The glare of Paris in flames is shot upon London smouldering and somnolent, with pauperism lying cheek by jowl aside of sleek ecclesiastical hypocrisy, effete cynicism, frantic and unsympathetic aristocracy. The personages introduced are a

sickly artisan and his family, a pompous dignitary of the Church, an irresponsible reviewer, a dinner parasite, a fashionable couple. Before a wretched hovel in Westminster, at the window of which the pauper leans to breathe the air, pass all the comfortable people; and scraps of their conversation, as overheard by him, are retailed to us by the poet. In the pauses of the poem, like a tolling bell, recurs the ominous refrain, "And there is *Peace* in London." This is the machinery of "The Red Flag." The situation is finely conceived and powerfully presented. The sincerity of the poet, his intense feeling for the terrible, the realism with which he has wrought every detail of his picture, and his passionate sympathy with the oppressed, make the general effect of this poem very impressive. As a satire, "The Red Flag" is by no means so powerful as it is when regarded as a highly realistic picture. Mr. Noel has neither the Juvenalian fluency of invective nor the Popian trick of satiric epigram. The force of his attack consists in the vehement intensity of his grasp on actual facts and possible consequences. In reading his poem, we seem to breathe the stagnant atmosphere which precedes a tempest:

"When Jove
Will o'er some high-iced city hang his poison
In the sick air."

Yet some of the merely satiric touches are powerful and pointed. The portraits of the soured critic and of the professional diner-out are both excellently bitter. Turning from "The Red Flag," we notice the same quality of passionate realism in "The Children's Grass." This lyric presents companion pictures of the Thames at Richmond and the Thames below London Bridge; of the child who in the one place—

"Chose to pull the tender stems
Where the dew-drop lingers,
And marvelled when the limpid gems
Fell upon his fingers"—

And of the little artificial-flower-maker in the other, who—

"Decks the blades with glass,
Sprinkles one and then another,
As with dew of grass.
* * * * *
Starved and very pale she seems,
With a hollow place
Dark beneath her eyes, how wearied,
Lashless looking on the bleared
Mimic grass,
Dewed with glass!"

There is no effort, by any reflection or moral-making, to bring out the pathos of the contrast. The two pictures, carefully wrought, tell their own tale. Though "War" is unequal in conception and execution, it contains many passages noticeable for the same concentrated power of description. Perhaps the best is the lyric entitled "The Roses of Bazeilles," which was suggested by Mr. Bullock's account of rose-trees blooming among the charred and blackened ruins of the burned village.

It is in his landscapes that Mr. Noel excels. The poems of which we have been speaking hitherto owe their finest quality to enthusiasm for actual life and contemporary history: they are full of the freshness of the present, the pulses of common humanity, the sympathies of a large and loving heart. They prove that the poet need not return upon the past for material. But in "Palingenesis," and "Richmond Hill," and the "Sea Symphony," Mr. Noel exhibits a rarer quality of artistic production. These poems are steeped in thought and feeling: Nature is represented with the most minute and patient accuracy; yet each

description is pervaded with a sense of the divine mysterious life that throbs within the world, and a passionate joy is kindled in the poet by his close communion with the outer world. Wordsworth and Goethe had both familiarised us with something of the same sort. But Goethe's pantheism was more scientific, Wordsworth's more contemplative, than Mr. Noel's. We need to travel back to the *Bhagavadgītā*, or to take Walt Whitman from the shelf, if we seek to match the pantheistic enthusiasm of the climax to "Palingenesis." The promise of Mr. Noel's earlier poem in this style, "Pan," is here fulfilled. The "Sea Symphony" has less of religious thought, more of human emotion in it. Perhaps this study illustrates Mr. Noel's power of painting at its best. The successive scenes of Tempest, Calm, Twilight, and Breeze, recall Brett, Moore, Whistler, and any others among our masters of marine painting who have been successful in rendering the moods of the "howler and scooper of storms—capricious and dainty sea!" The descriptions, though minute, are not tedious, because they are full of restless movement, and vitalised with emotion so intense that the keen vision of the poet is communicated by it to his readers.

The glamour of water is rendered with wonderful felicity in the "Water Nymph and the Boy," which in many respects is the best poem in the book. Taking the legend of the Naiad who draws downward to herself and death a beautiful mortal, Mr. Noel has, by the force of his intense and realistic treatment, invested an old subject with a new charm. There is something irresistibly fascinating in the dubious fable-land that lies between humanity and nature: and this fascination has been consummately rendered by Mr. Noel, who blends the images of the water and the boy in a blaze of noonday gorgeousness. The song of the nymph at the end—

"Father and mother,
Weeping and wild,
Came to the forest,
Calling the child;
Came from the palace,
Down to the pool,
Calling my darling,
My beautiful!" &c.

seems to suggest some of Weber's eeriest and frailest melodies. And to heighten the effect of this picture, Nature in her brightest mood is placed in contact with the highest product of civilisation. The boy is no mere Hylas or Narcissus, but a very high-bred and delicately nurtured young gentleman! "Azrael" is a summer-night study of the same order, in which human passion and the luxury of the world are wrought together into a shot-silk sort of splendour. A still further blending of the gorgeous in description and the passionate in feeling, with the addition of a philosophical conception, distinguishes the "Dweller in Two Worlds." This poem narrates, under the form of allegory, the experience of a soul which habitually lives in a state of division between higher and lower impulses. Harmony is in the end produced by a return to the pantheistic philosophy which lies at the root of all of Mr. Noel's thought, and which is beautifully expressed in the passage which we propose to quote. The discord of pain or sin, passing through musical modulations, until it fades into divine silence; what image better expresses a modern nineteenth-century dream of Nirvana?

"Last, while the clouds from all the mount were torn,
In desolate lower roots of it a horn
Resounded harsh and loud; but higher rocks
Multiplied into most ethereal shocks
Of melody the sound, which, as it passed
To loftier shining regions, ever amassed

A more ideal spiritual tone;
Till, like a delicate subtle flame, it won
Its way to yonder battlements of ice,
Exhaling there in silver paradise,
As from some luminous aerial places,
And sweet serenely modulated faces;
Dissolving now, an overblown faint flower,
Into a perfumed stillness evermore."

We have left ourselves but small space to speak of the minor poems in this volume. Yet it would not do to omit some notice of the elegiac sweetness of "Eric," or of the picturesque delicacy of "Early Spring," or of the wild passion of "A Lady to her Lover," or of the weird dream-atmosphere of "Death and Life," or of the quaint, old-world, musical charm which lingers about "The Old Piano." A brief quotation from this last lyric will form a fitting termination for the analysis of Mr. Noel's book. It is always well to end upon a soft and plaintive note that echoes in the memory:

"In the twilight, in the twilight,
Sounding softly, sounding low,
Float some cadences enchanted,
Eerie songs of long ago.

In the gloaming, in the gloaming,
Sits our child with lips apart,
Near her mother, who is singing,
Near the woman of my heart.

O how thinly, and how feebly,
Rings the ancient instrument!
When it opened, slowly yielding,
What a weird unwonted scent!

Plaining wildered all forlornly,
As it were surprised from death;
On a plate of faded ivory
Some lost name faint wavereth.

Wildered sorely, wildered sorely,
In oblivion mouldering,
To be challenged now for music
That the dead were wont to sing!"

Here we must break off abruptly: for the poem glides along like the frail minor tones of the harpsichord, and the ghosts issue from it like those strange cobweb phantoms which Miss Claxton used to send to make us pensive in the Dudley Gallery.

J. A. SYMONDS.

LITERARY NOTES.

The Accademia dei Lincei was occupied during its November sitting with the somewhat metaphysical question of its own identity with the famous Lincean Academy founded in 1603 by Federico Cesi, duke of Acquasparta. It was decided that, as the statutes of the modern foundation speak of it as a "revival" and "restoration" of the ancient one, the interruption of its existence does not in the least interfere with the right of the actual Academy to look upon the meritorious young Cesi as its real and only founder. The other proceedings were of some interest. The society proposes to publish a MS. *Trattato della mano dell'uomo paragonata alli piedi di alcuni animali quadrupedi e di uccelli*, written by Francesco Stelluti, one of the original Lynxes for incorporation with G. B. Porta's *Fisionomia del corpo umano*, published at Rome in 1637.

The increased political and commercial activity of which Vienna is the centre, and the Vienna Exhibition is to be the expression, has a counterpart in literary and theatrical circles. Complete editions of three distinctively Austrian writers, Grillparzer, Friedrich Halm, and the comic dramatist Bauernfeld, are either accomplished or in progress, and though matters have changed a little since Carlyle's expression of grim amazement at the space taken up by theatrical intelligence in all German newspapers, the energy and success of H. Laube's management of the new *Stadt-Theater* is still a matter of national interest. It is also asserted to the credit of the Vienna public that pieces

like *Fernande* and *La Coupe d'argent*, which succeed in Paris and Berlin, are either coldly received or actually hissed and withdrawn.

O. Hartwig writes to the *Allgemeine Zeitung* (December 10, 11) to invite Italian scholars to be on the watch for any MSS. or authentic extracts that may have formed part of a Chronicle, ascribed to Brunetto Latini, of which the earlier portion may perhaps be actually his work. Herr Hartwig failed to trace the fate of the Chronicle after the dispersion of the *Bibliotheca Gaddiana*, to which it was said to have belonged, but he has found fragments, one in MS. which he judges from the character to be certainly as old as Dante, another printed in Lastri's *Osservatore Fiorentino*, and a *Storiella antica creduta di Ser Brunetto Latini*, appended to a reprint of Brunetto's translation of three of Cicero's orations. The latter passage contains a slightly different account of the origin of the Guelph and Ghibellin factions from that of Villani and Dino Compagni. The betrothal of the daughter of Lambertuccio dei Lamberti to Buondelmonte is represented as an atonement or reconciliation after a former quarrel, and the taunt which led Buondelmonte to leave his promised bride in the lurch was that he was marrying for fear of his wife's relations, his own family having been the original aggressors. The saying, "Che cosa fatta capo a," which decided the Lamberti to take mortal vengeance for the affront is here given still less intelligibly *Che cosa fatta cappa a*, but the context shows the sense to be the same. Herr Hartwig shows from the same source that in Villani, iv. 29, there is probably the mistake of a century in the date (1113 for 1213), whence he argues to the importance of checking Villani's statements by contemporary documents.

The friends of German literature will be glad to hear that a French scholar, M. E. Müntz, has found unedited documents concerning one of the most illustrious poets of Germany whose biography has remained most obscure as yet, in spite of all researches, John Fischart. These documents are Fischart's act of marriage, dated St. Martin's day 1583, and several allusions to his family, especially his wife, who married again on the 24th April 1593 (she married J. L. Weidmann). These documents have been utterly unnoticed by the historians of German literature, Goedeke, Koberstein, Vilmas, &c., as well as by the latest editor of Fischart's works, H. Kurz. M. Müntz will soon publish these documents, and so little is known yet of Fischart's life that his contribution will be welcome.

A writer in the *Athenaeum* states that Mrs. Somerville had written an autobiography which she intended for publication after her death.

Art and Archaeology.

PAOLO PINO'S *Dialogue of Painting*. [*Dialogo di Pittura di Messer Paolo Pino*. Venice, 1548.] Reprinted by Dr. Max Jordan. Leipzig, 1872.

PAOLO PINO, whose rare manual has been reprinted with singular care by Dr. Max Jordan, was a painter, and a contemporary of Titian. Though Venice contains none of his works, and Venetian historians seem unacquainted with his name, he claims to be of authority in his craft, and we may admit that to some extent he commands our attention and respect. It would be a mistake to confound him with his namesake of Lucca, who was a pupil of the Caracci; for Venice, according to his own statement, was the place of his birth, and Savoldo was his master; but it would be no less a mistake to consider him identical with Pino da Messina, who flourished before 1500. There is reason to believe that Pino was one of the numerous portrait-painters who lived in comparative obscurity at Venice about the year 1550. In a catalogue of the Mantova collection, which was one of the celebrated ones at Padua, the portrait of Paolo Pino by himself was hung by the side of Mantova's likeness by Titian; and there is a good bust of a physician

by Pino, with the date of 1544, in the gallery of the Uffizi. As a composer of altar-pieces, Pino's skill is moderately displayed in a Virgin and Child with four saints (1465) which still adorns the church of San Francesco at Padua. He appears to better advantage as the designer of a marble pillar which once supported the flagstaff of the republic, or of allegories with framings and ornament in the public "Loggia," in the *castello*, of Noale.

Pino was not without patrons, having induced the doge Francesco Donato to accept the dedication of his book; nor was he without friends, as is shown by his correspondence (1464) with Alvise Cornaro, the Mæcenas of Venetian artists. His acquaintance with the literature of art was not large, and we doubt whether he had ability to master Pliny in the original; but if he took his knowledge of the ancients from translations or adaptations, he read Cennini at least in its primitive form; and it is probable that he was no stranger to the works or to the person of Vasari, both of which he mentions with approval. Vasari at that time had only written the *Lives*, and Pino could only have had them from the author. But, more than this, if we compare the pages of the *Lives* with those of the *Dialogue*, we trace the source from which Vasari derived his description—of Pordenone as a master of letters, of music, and of fence; of Sebastian del Piombo as a player of the lute, and of Savoldo as a painter of dawn or sunset scenes. A patient collation proves that Pino paraphrased numerous passages of Alberti's *Pittura*, accepting much that that essay contains, whilst rejecting much that Alberti inculcates. Casual allusions to Dürer's *Unterweisung* and Gaurico's *Sculpture* testify to some knowledge of the writings of these masters, whilst da Vinci's treatise—the best and most celebrated of its kind—is passed over in silence. Nor is it the less remarkable that this should be so, as Savoldo, who taught Pino, had been in the service of the last duke of Milan, and might have communicated to his pupil what the Lombard craftsmen of the time knew so well.

The form into which Pino cast his dialogue is loose and picturesque. He quickly tires of the strict laws of art, and wanders from a lesson in optics to anecdotes, and from these again to the true mould of beauty in females or proportion in males. In a fit of ecstasy he contemplates "design as the mistress and forerunner of all other arts, the preserver of the effigies of heroes, the mirror of the passions, the perpetuator of spring and summer, and the limner of life and death." He recovers from this rhapsody to discuss the condition of artists in his day as compared with those of antiquity, not omitting to repeat the story of Zeuxis and the virgins of Crotona, or of Apelles and Campaspe. He describes the true painter in the words of Cennini as one who is led to the exercise of his profession by a natural inclination, and not driven to it by poverty and want; he defines painting under the three heads of design, invention, and colour, subdividing these again into parts after the model of Alberti. Like Alberti, too, he affects to consider the quality, the diversity, or the effects of colours as too well known to need further elucidation, but as to practice, he lays down rules which tell how widely the range of thought in craftsmen of the sixteenth century differed from that of craftsmen in the fifteenth. It has been well observed by Anton Springer that Alberti's aim was to raise art from the slough into which it had fallen in the hands of the degenerate Giottesques. With that view he dwelt emphatically on the plastic development of form, on the desirableness of a regular distribution and pleasant diversity of figures, the charms of colour, the delights of a pure and constant imitation of nature. He wished to enforce par-

ticularly the necessity for careful drawing; and he went so far as to recommend the first sketch of a figure in its anatomical development, the second in its nude aspect, the third in its appearance as clothed in drapery. To get at detail with accuracy, he suggested the use of the *veil*, through the squares of which the position of every muscle and bone might be seen and transferred proportionally and correctly to the panel. But in the course of years the purpose of the Tuscan reformer had been attained. Art had reached that form of perfection which preceded its inevitable decline; and it was quite natural that the principles of a Florentine of Masaccio's time should no longer have applied to the taste of a Venetian of 1548.

Pino, we observe, lays stress on points altogether different from those which occupied the attention of Alberti. He thinks it desirable to be simple in variety, but one figure at least, he declares, should be set in a manner "strained, mysterious, and difficult," in order to test the master's skill. To "use excessive diligence in contour or in lining out inner forms with the help of the veil, or to model in monochrome after the fashion of Giovanni Bellini," he considers useless and so much labour lost, because "the superposed colour must in the end cover all that has cost so much time and trouble to produce." In fact, he concludes, the diligence of a master should be moderate and not extreme. He must have a facile hand and a firm touch, and disdain the use of the stick; yet he must not affect the baneful rapidity of Andrea Schiavone; and he should have patience to lay by a work of partial completeness that he may take it up again with a fresh and critical eye.

In a further discussion between Pino's interlocutors as to various methods in painting, we note how completely the influence of Giorgione and Pordenone affected Pino's judgment. He treats of the various modes of fresco, tempera, and oil; and gives judgment in favour of the first, alluding with decisive particularity "to the mistake of Sebastian del Piombo in making use of oil for mural decorations that already show symptoms of decay." At Rome no doubt the frescoes of del Piombo underwent change, and suffered from the effects of time, but at Venice frescoes hardly outlived the painters who executed them.

The purpose and utility of perspective, the origin of the invention of painting, the claims of precedence variously urged by the advocates and opponents of sculpture, are touched upon; and a list of dead and living artists, with a description of the qualities which should go to make up an ideal craftsman, completes the dialogue.

What Pino teaches may have bespoken the attention of his contemporaries; it cannot fetter ours. There is more interest in the connection of his subject with the state of art and artists at the period in which he wrote. We detect the partial favour of a disciple in the sentences in which the public is accused of being hard and neglectful to Savoldo; but it is not easy to test the justice of the remark that "few painters, if judged by their works, are acquainted with perspective." The ideal of female beauty which Pino recommends is the full and rich ideal which attracts in the canvasses of Palma and del Piombo. The strained, mysterious, and difficult figure intended to test the painter's subtlety recalls the forcible but unnatural nudes which are almost invariably found in the compositions of Pordenone and Paris Bordone. The quaint advice to composers to adorn their subjects with trophies, hangings, festoons, and friezes, or dress their personages in armour, slashes, embroideries, fringes, veils, and gems, points surely to the schools of Bergamo and Brescia, out of which Savoldo came.

When Lauro asks Fabio why painting is in less veneration and less richly rewarded than in the classic times, Fabio replies that the cause lies in the unworthiness of artists who aspire to be masters before they have ceased to be disciples, in the ignorance of patrons, the penury of painters, and the sordid character of purchasers. Poverty prevents the professional man from conscientiously finishing his works; greed prompts him to produce much and rapidly. The public does not know a canvass of Titian from one by Bonifacio; every nobleman keeps a painter of his own; and he who should wait till he is called is likely to starve. How, under these circumstances, a youthful student can be expected to live is hard to say; nor is it practicable to ask him to lay by his work for future improvement, because such advice, though it may be good for a successful master, is a mere mockery to one whose pieces are worth so little in the market. Happy indeed, he concludes, is the youth who earns a day's salary by painting chairs or chests.

It is probable that this lamentation reveals the true state to which the great mass of artists at Venice was reduced in the sixteenth century. Ridolfi says that prices were then much lower than they became in his age. Titian, he observes, lived at first in moderate circumstances, and would never have been rich but for the patronage of the emperor. Pordenone's fortune was never large. Schiavone is known to have begged for a job from the painters of chairs and tables, who were licensed by an old law to keep shops under the porticoes of the Piazza of St. Mark; and the dealers who were known under the name of *bottegai* were infamous for buying the pictures of necessitous young fellows at nominal prices. The public hardly required to give orders when they could purchase for a trifle the best works of the second or third class at the exhibitions of the *merceria*. The custom of decorating the outer walls of edifices was so general, and the number of skilled men who could carry out such decorations was so great, that no one who built a house thought of engaging any one to adorn it, the matter being usually left in the hands of the master mason, who paid the designer with the wages of a journeyman. Tintoretto was certainly not one of the lowest of his craft, but he sometimes exercised his ingenuity in the endeavour to obtain a commission for a house front. The rich man Ravagnino stared when Pordenone asked fifty ducats for covering his palace with frescoes; but he was justified in his astonishment, because other men were to be had for much less money. With art and artists in this condition it seems almost unnecessary for Pino to recommend that the rivalry of painters should be settled by a competition "similar to that which took place between Titian and Palma Vecchio for the 'Death of Peter Martyr' in San Giovanni e Paolo."

An interval of nine or ten years separates the publication of Paolo's *Dialogue* from that of Lodovico Dolce, who wrote at Aretino's instigation to challenge and, if possible, to destroy, the supremacy of Michel Angelo. Ariosto held that some painters might be excellent, but Michel Angelo alone was divine; and this sentiment was shared by Pino in common with most of his contemporaries. Nor does it seem enough for him to affirm that a model painter ought to be a draughtsman like Michel Angelo and a colourist like Titian; he condescends to notice particularly as men of promise Agnolo Bronzino and Vasari, who were the best known representatives of Michel Angelo's school in the north. It is needless to point out that in Venice as in Florence the worship of Buonarroti was the prelude to the decline of art. Daniel de Volterra's casts from the Medici monuments at San Lorenzo were in the workshops of all Venetian painters. Santo Zago copied one of them on a house front at Venice. Tintoretto studied them by lamp-

light, and wrote on the wall of his studio, "Il disegno di Michel Angelo è il colorito di Tiziano." But in striving to combine the perfection incarnate in two of the greatest masters of the modern world, the later Venetians only hastened their own fall.

J. A. CROWE.

ART NOTES.

A correspondent of the *Allgemeine Zeitung* reports the discovery at Mantua of some frescoes apparently by the hand of Giotto. The Venetian photographer Raja happened to be in Mantua on business; he there found some works going on in an old palace of the Gonzaga family, in a chamber which had formerly served as a private chapel. The floor was strewn with painted fragments of the wall, and the business of destruction was going on rapidly. Raja succeeded in arresting the progress of the workmen, and, calling Professor Botti, of Pisa, to his aid, managed to restore the portions which remained intact, and to remove them safely from the surface of the wall. These fragments belong to two different paintings; the subject of one is the Madonna throned, attended by St. Catharine and St. Stephen (or Laurentius?); of the other, the Crucifixion. Of this latter, half of the figure of the Christ was still existing when Raja came upon the scene, but he has only been able to save an arm and three figures of angels. It is these portions which are reported to show evident tokens of Giotto's hand. He was at Padua in 1303, but nothing has hitherto come to light from which we might suppose ourselves authorised to infer that he was ever in Mantua. The remnants of this fresco must, it is asserted, be his work, and it is suggested as probable that the whole of the chapel was painted under his superintendence. The other fresco is stated to be of great historical value, but is not ascribed to Giotto; it is possibly by a pupil, who shows great force in modelling, but a less delicate feeling for form.

The sale of the paintings, drawings, and other works of art, forming the collection of M. Théophile Gautier, will take place at the Hôtel Drouot on the 14th, 15th, and 16th of January. They will be exhibited there for two days previous to the commencement of the sale.

A society has recently been formed at Paris which has for its object the encouragement of Christian art. It is entitled "Société de Saint-Jean pour le développement de l'art chrétien," and has just issued the programme of a competition which it is about to open. Artists are invited to present a cartoon representing St. John the Evangelist in some principal moment of his life. The moment is left to the taste and discretion of the competitor; the style must be that of the great epochs of Christian art, which is rather an indefinite prescription. The height of the figure must be at least one metre. The works are to be sent in on April 20, in order that they may be publicly exhibited from the 1st to the 20th of May. There are three prizes of 1000, 300, and 200 francs respectively. One of the best known names on the jury is that of M. Gaillard, the celebrated designer and engraver. The address of the bureau is rue de l'Université 47.

M. v. Gedéonow writes, in the *Allgemeine Zeitung* of December 1, a short article of comment on Herr Dobbert's notice of the group of sculpture ("Dead Child on a Dolphin") recently brought before public attention at St. Petersburg, and supposed to be executed as well as designed by Raphael. This notice also appeared in the pages of the same journal, and in writing it Herr Dobbert laid great stress on what seemed to be the weaker links in the chain of evidence which justify us in ascribing the work to Raphael. The distinguished director of the Hermitage endeavours to meet these criticisms wherever it is possible to bring a fair show of argument and probability against them, and concurs with Herr Dobbert in pressing the importance of instituting a searching comparison between the technical carrying out of the group in question with that of the "Jonas." M. v. Gedéonow evidently feels well assured that such a comparison, were it effected, could only serve to establish the reputation of the Hermitage group.

The second volume of the late Dr. Friederichs' catalogue of *Berlins antike Bildwerke* has been carefully edited by the author's friend, Dr. Weber. The volume contains the description of the small objects and bronzes in the old museum; it is no mere catalogue, but a work of high scientific merit, and fulfils the most exacting of the requirements of modern knowledge. The *Allgemeine Zeitung* for December 6 contains the commencement of a very careful critical notice of the work, the writer of which takes occasion also to give expression to the feeling of bitter regret with which all true students regard the loss which archaeological studies have sustained by the too early death of Dr. Friederichs.

A sixth edition of Sir Charles Bell's *Anatomy of Human Expression* has lately been published by Mr. Bohn. It is a reprint of the third edition, which was published posthumously, but had been previously revised and rearranged by the author, who had made a visit to the continent shortly before his death for the express purpose of verifying and testing his principles of criticism in art by study of the works of the great masters. The present edition has been carefully got up, but not one of the illustrations will for a moment bear comparison with the original plates in the first edition; the text is of course specially interesting as containing the author's last thoughts.

A translation, by F. E. Bunnett, of Dr. Wilhelm Lübke's *History of Sculpture* has been brought out by Smith and Elder. If the translator had only done his part as well as the publisher, we should have had to congratulate ourselves on the possession of a highly creditable performance. As it is, we are reduced to saying that the paper, the letterpress, the whole get-up, in short, is admirable, and the translation execrable. It is full of blunders of both sorts, blunders arising from want of knowledge of the language, and blunders arising from want of knowledge of the subject. "Zu," for instance, is rendered "to" instead of "at," so we have the citizens of Apollonia erecting a statue to Olympia. One might fill two or three pages of foolscap with a list of the really bad mistakes and ridiculous statements in which these pages abound, and for which the translator's ignorance is evidently responsible. This being the case, it is fortunate that no attempt has been made to give Dr. Lübke's text that revision of which it now stands so much in need, and which is absolutely necessary in order to fit the work for the purposes of students. A work which omits to mention in the department of ancient sculpture, the Diadumenos from Vaisson, now in the British Museum, or the sculptures from Priene, or to give the results of the recent excavations at Ephesus, cannot be looked on as making any attempt to meet the requirements of a standard text-book.

We give some of the most important of the objects sold and the prices obtained at the sale of M. F. L., which we announced in our last number. A cippus, in ivory, Italian work of the sixteenth century, depicting in bas-relief the subject of Theseus combating the Amazons, 3600 frs. Second cippus, time of Louis XIV., on which the battle of Arbela, after Lebrun, is sculptured, 405 frs. Bust of Diana of Poitiers, after the marble group by Jean Goujon in the Louvre (it is extremely doubtful that the head of the nymph in this group is a portrait), 12,000 frs. A comb of the time of Francis I., with figures, 510 frs. Another comb, an imitation of the old style, 750 frs. A bronze bust of a girl, by Saly, 1480 frs. Bust of Anius Verus, son of Marcus Aurelius, 2850 frs. The celebrated snuffbox, by Lioux de Savignac, fetched 12,100 frs.

New Publications.

HARTMANN V. DER AUE. Herausgegeben von F. Beck. (Deutsche Classiker des Mittelalters, herausgegeben von F. Pfeiffer. 5. Band.) Leipzig: Brockhaus.

KEKULÉ, R. Das akademische Kunstmuseum zu Bonn. Bonn: Weber.

KONEWKA, P. Zerstreute Blätter. München: Gummi.

PHILIPPI, A. Ueber die römischen Triumphalreliefs und ihre Stellung in der Kunstgeschichte. Leipzig: Hirzel.

Physical Science and Philosophy.

RECENT WORKS ON CHEMISTRY.

[FIFTH ARTICLE.]

XIII. Gmelin-Kraut's *Handbuch der Chemie*. Anorganische Chemie. 6th Edition. Vol. I. Part II., 1st to 4th Lieferung. Vol. III., 1st to 4th Lieferung. Heidelberg: 1871-72.*

THERE is nothing in the appearance of a new edition of Gmelin's *Chemistry* calculated to cause dissatisfaction. That the previous edition, occupying between nine and ten thousand closely-printed pages, was no sooner completed than a new one was advertised, must be taken rather as evidence of the esteem in which it and the science it expounds are held in Germany.

The nature of Gmelin's *Handbook* is now well known. It does not propose to furnish the reader with ideas; it does not expect to be read or studied with interest, or perhaps at all. It is only for consultation. In some respects, therefore, it differs from the systems of Berzelius and Gerhardt, whose writings are interesting because they are the work of men who endeavoured to extract the essence of the facts they recorded; who, not content with results, gave also reasons and criticisms. If, however, we deduct this architecture of thought, Gmelin's *Handbook*, as a repository of facts and details with their agreements and discrepancies, is the fullest, most accurate, and most modern of all the extant systems; and every one who consults it ought to feel grateful to author, editors, and printer, for the orderly arrangement of a vast mass of materials, even though the most ardent admirer of it must admit that it is sometimes not easy to find what one wants.

But there is no doubt that a new edition was necessary, for the Inorganic division was a considerable way behind, and it was requisite to bring it down to the present time. During the twenty years which have elapsed since the first volume of the fifth edition appeared, much has been done in rearranging the elements, bringing together those which evidently form natural groups, and breaking down the distinctions, formerly rather deeply drawn, between the non-metallic and metallic elements. The improvements are the outcome of the greater attention paid of late years to the resemblances and analogies of elements and their compounds, than to their differences: the latter having been fostered by the spirit of analysis which dominated in the chemistry of the earlier part of the present century, the former being the result or accompaniment of the synthetic investigations which are now more prevalent. Important also are the changes which have passed, or are passing, over chemical theory, and which have had an influence on the descriptive part of the science.

When, therefore, it was announced that the modern combining weights would be adopted in the sixth edition, we anticipated that the whole work would be thoroughly revised, so that not only would the discoveries recently made be inserted in the proper places, but the more conspicuous defects of the previous edition, even on its own plan, would be removed.

One of these defects was the want of arrangement in the description of the sources of, and methods of preparing, different substances. Thus, the sources of oxygen, to take the first body on the list, are set down apparently at random. There is no general statement as to the bodies which yield it; there is no classification of any kind of the reactions by which it is produced; and there is no indication as to the

best sources of it. Before one can be certain that a given substance will yield oxygen, one must turn over and examine several pages, on the chance of getting the information. The sources of iodine afford another instance of this unsystematic gathering of facts. It should not be forgotten that when a philosophical classification is impracticable, there is the alphabetical upon which to fall back.

Another defect, or at least an anomaly, exists in the arrangement of the non-metallic elements. That which the author gives (5th ed. i. 480) is electro-chemical: he begins with the most electro-negative elements (oxygen, fluorine, chlorine) and ends with the most electro-positive (boron, carbon, hydrogen), while nitrogen is put by itself. But when he comes to describe the elements he entirely reverses this order; for after disposing of oxygen he steps to the other extreme, hydrogen, and works backwards to fluorine, concluding with nitrogen. The result is that all the conventional arrangements and nomenclature are more or less disturbed. The compounds of the electro-positive elements appear under the electro-negative: for instance, the sulphides of phosphorus are to be found, not under phosphorus, as one might expect, but under sulphur; chlorides of sulphur, not under sulphur but under chlorine; and so on.

Granting that oxygen, hydrogen, and nitrogen, from their character, require exceptional treatment, it is not obvious what gain there is in the transposition; and there is nothing to bridge the gap opened by it between the author's and others' text-books, and between the two divisions of his own.

It is somewhat disappointing that in these particulars there is not the smallest difference between the fifth and sixth editions. The very same classification of the non-metallic elements is retained, almost word for word, although the electro-chemical theory is no longer dominant; the same inverted order is kept, oxygen, hydrogen, then carbon, boron, phosphorus, as before. Consequently under phosphorus one gets the oxides, but for the analogous sulphides one has to refer to sulphur.

To exclude tellurium, arsenic, and silicon at least from the non-metallic elements, as is still done, is now considered erroneous, but, in truth, the elements should have been arranged according to their generic characters, and the distinction between metals and non-metals dropped. It is true that to arrange the material according to current views would have cost more labour; but it would have less required the pen than the scissors, and the result would have been freedom from incongruities. It is pleaded that to accommodate those acquainted with the previous edition the old order has been retained. No doubt, had this been modified, comparison between the editions would have been rendered more difficult, if not impossible. But, on the other hand, those likely in future to use the sixth edition will be trained in the most modern chemistry, and will have small occasion ever to refer to the fifth. When Gmelin designed his work he adopted the views current in his time; had the editors modified the plan to suit the subsequent developments of the science, they would only have followed his example, and it is much to be regretted that they have not employed their experience in making their new edition as perfect as one can expect any system to be.

When we pass from these general features to more detailed examination of the work, we find that its modernisation is rather superficial. The combining weights and formulae, and the account of entirely modern researches, are of course modern, but in nomenclature, classification, and so on, the dregs of the old system are obvious. With respect, however, to the addition of new facts, very great changes have been made, and yet their introduction has not

* Since the above was written, the conclusion of Vol. I. Part II. and another section of Vol. III. have been received.

disorganized the work. Here it is, where possibly the absence of ideas shows to advantage, just as advantageously as the absence of bibliographic theory from the catalogue of a library. The facts in Gmelin's handbook are not unlike the specimens in a physiological museum. Each one is bottled up by itself, and has perhaps a bleached and lifeless aspect, or, by loss of spirit, has become somewhat shrivelled. Taken together, they may illustrate some general principle, but it is easy to shift them to and fro, to put new ones where the old stood dingily, to relegate these to the lumber room of history, or to put an end to them altogether.

On some such principle as this the editors have acted in preparing this edition, so as to make it modern, and to keep it within reasonable compass. In it the inorganic chemistry still to be nominally in three volumes, but volume i. is in two divisions. The first is to deal with general principles, and is to be entirely revised by Dr. Naumann. No part of this has appeared. The second division contains the non-metallic elements, and is half completed. Volume ii., containing the alkaline, the alkaline earthy, the earthy and brittle metals, is still wanting; but of volume iii., which treats of the rest of the metals, the first four parts, containing the metals from zinc to iron, have been published.

In the portion occupied by the non-metallic elements there are improvements. Thus, certain properties which were formerly treated of in the general introduction are now given along with the other properties of the substances. Among these may be mentioned combining weight, vapour density, refractive index, and some others. On the other hand, some properties are transferred to the introduction.

Everywhere in these parts one meets with additions: numerous new sources of bodies have been opened up, new methods of preparation have been devised, many points left vague by the older chemists have been re-examined and well defined, revisions of particular properties and reactions by recent experiments have supplanted the earlier results.

Of the elements which have been reinvestigated and with success, the principal are carbon, sulphur, phosphorus, and iodine. The researches of St. Claire Deville and Berthelot upon the different states of sulphur have extended the account of that element from six pages in the fifth edition to nineteen in the sixth, and there is a similar extension in the case of phosphorus by the labours of Schrötter, Hittorf, Blondlot, and others. Several of the compounds of these elements have likewise been closely scrutinized and new results have been obtained. In particular, the sections may be specified upon the phosphides of hydrogen, the polythionic acids and the sulphophosphorus compounds. The constitution of the phosphites and of the iodates and periodates as explained by Rammelsberg and others has received full justice of the editor: but he has not mentioned that the assumption of these so-called condensed acids is not universally agreed to. This may have been excluded on account of its remote likeness to criticism.

It is impossible of course to enumerate all the changes which have been made; they will be found on almost every page. There are, however, one or two sections in general which must be referred to because they might have been more fully dealt with. The most striking is the literature of the science, which is meagre in the fifth, and remains much the same in the sixth edition. Again, the main sources of some of the elements might have been enumerated. Nothing is said about the distribution of oxygen, hydrogen, sulphur, phosphorus, carbon, boron, though lists occupying nearly five closely-printed pages of the different springs, plants, animals, and minerals in which bromine and iodine have been found, are given. No allusion is made to the recovery of sulphur from soda waste, and no list is given of the

substances by which oxygen is absorbed at ordinary temperatures.

About entirely new bodies there is very little to say. No new class of compounds has been discovered, and comparatively few single bodies: the most important of these are ozone, oxysulphide of carbon, and graphitic acid. There are besides the selenides of phosphorus, seleniothionic acids, the oxides of iodine, perbromic acid, and a few others. The views relative to flame propounded by Frankland as a correction of Davy's are given, the absorption of hydrogen by metals, the various corrections introduced by Stas in the course of his determination of combining weights, the results of Bunsen's experiments on the solubility of gases in water and other separate investigations of importance are duly recorded.

But if altogether new bodies are rare, additions to our knowledge of known bodies are abundant, as we have already said; in some cases enough to lead to considerable modification of opinions already held. The number of these shows how activity chiefly prevails in checking previous work, and in obtaining precise information where the older investigators were baffled in their attempts. In reading these descriptions one sees how the names of Berzelius, Liebig, and others gradually give way to those of less known men, who, having the advantage of recent improvements and carried on by the spirit of the time, are able to amend and widen the older researches, and thus to dominate as authorities in the present.

This comparison of these two editions, separated by so short a period, is interesting on another account. One sees thereby how observation shifts from one object to another, how those which were of great importance twenty years ago have set for the time, and have had the account of them curtailed in the new edition. Catalysis, for example, which occupies many pages in the previous edition, is reduced to a few paragraphs in the present.* On the other hand, objects, which were just on the horizon formerly, are now in the zenith; and chemists who do not join in contemplating them, will hardly get credit for doing useful work, on whatever other object their gaze may be fixed. Ozone, which was mentioned doubtfully and indirectly in connection with electricity, has, during the interval, been so largely examined that it has acquired as much importance as ordinary oxygen. Following this, the various states of the elements have been minutely investigated, as will be seen by reference to carbon, boron, sulphur, and phosphorus, the varieties of which bodies are a little bewildering, especially when one does not know whether the experimental physical differences are sufficient evidence of essential chemical difference. All these phenomena are of recent discovery, so recent that in the fifth edition the term allotropy, now in regular use to denote the facts, appears on trial merely. For a similar case the discussion in the fifth edition on Wurtz's theory of the basicity of phosphorous acid, of the nature of an anhydride, &c., may be referred to. These doubtful views have since prevailed, and have given rise to investigations which have brought new compounds to light. Perhaps the most striking is the decision with which Graham's explanation of the phosphoric acids is given in the present edition. Propounded a little earlier than 1852, it is not accepted unqualifiedly in the fifth edition, but is discussed as if it were not yet quite confirmed. More especially as an extension of Graham's view, and as a deduction from atomicity and chemical structure, may be remarked the attempts to formulate the complex basic and anhydrous

* It is possible, however, that the account of catalysis may be transferred to the introduction, to be treated at length as a general condition of chemical action.

salts, such as the borates, pyrophosphates, sulphates, iodates, and periodates.

The theory, by which the character of these salts is elucidated, was unknown less than twenty years ago, and it has not yet been subjected to thorough-going criticism. It is not unreasonable therefore to suppose, that it will have passed the meridian in less than twenty years hence, and have gone as completely out of view as the electro-chemical theory, which had more of experiment and less of hypothesis for its foundation.

As far as it goes then, this new edition exhibits no falling off in fullness and accuracy; but it is a compromise, and it is to that extent temporary. Works which are purely modern will have the advantage in the meantime, though otherwise not so good. Sooner or later it must be entirely remodelled, and since the editors have seen fit at present merely to supply deficiencies, they may be able to take advantage of the delay to become the first expounders of a quite new arrangement of chemical natural history, based upon the next phase of chemical theory.

In general appearance the work is much improved. The figures of crystals are now printed along with the description, instead of being given on a separate plate at the end of the volume. There are no figures of apparatus.

We may hereafter avail ourselves of the appearance of the subsequent sections to point out novelties and improvements, or what may seem to be the reverse.

J. FERGUSON.

Correspondence.

TO THE EDITOR OF THE ACADEMY.

Exeter College, Oxford,
December 3, 1872.

SIR,—In the Notes of Scientific Work of the *Academy* of November 1 (vol. iii. p. 412) there is an abstract of a paper by Dr. A. Künth on *Pteraspis*, in which evidence is brought forward to establish a view as to the nature of the organisms included under that term, contrary to that which I (confirming by more extended study the views of Agassiz, Salter, and Huxley) have put forward in my monograph of the *Cephalaspidae*, published by the Palaeontographical Society. It is to me a cause of twofold regret that Dr. Künth has perished in the Franco-Prussian war, for not only have we thus lost a chance of obtaining additional knowledge of the Berlin *Cyathaspis*, but I shall be unable to obtain from him the admission that his conclusion is not in accordance with the facts. Nevertheless, I am bound to point out how valueless is the evidence of Crustacean affinities for *Cyathaspis* adduced by him, and how firmly, on the other hand, it is established that the *Heterostraci*—or genera *Pteraspis*, *Cyathaspis*, *Scaphaspis*—are the remains of fish. 1st. The minute structure of these shields or cephalic plates is a very peculiar one, having a striated, a cancellous, and a laminate stratum. In the three genera it is beyond all doubt established that the structure is identical, as Dr. Künth admits. The same kind of origin must be assigned to the plates of all three genera. Hence, if *Pteraspis* be the remains of a fish, so are *Cyathaspis* and *Scaphaspis*. This position, I believe, is unassailable, and was admitted by Dr. Künth. 2nd. A specimen, most carefully figured and described in my monograph now in my possession, but which I shall shortly place in the British Museum, shows seven rows of rhomboid scales attached (not merely adjacent to) to a portion of the head-shield of a *Pteraspis*. That these are true scales or lozenges of sculptured calcareous matter is absolutely certain: it is also absolutely certain that the shield is Pteraspidian, and that the scales and shield belong to the same individual organism. This is clear from the figures drawn by Mr. Fielding, and cannot be doubted without charging both him and me with gross misrepresentation. 3rd. The scales are fish-like. I know of no Arthropod, nor any other organism except a Fish, which possesses any structure even remotely representing them. The shells of *Chitonidae* and *Cirrhipedia* are the only animal structures, except the scales of a ganoid fish (with which they agree exactly), which they could even vaguely suggest. Hence the *Pteraspis* shield was borne by an organism which

bore also scales like those of a fish: that is, a fish or fishlike animal. And what is true of *Pteraspis* is from paragraph 1 shown to be true of *Scaphaspis* and *Cyathaspis*. 4th. In figs. 8, 9 of pl. vii. of my monograph restorations of the form of the shield of *Pteraspis* are given, which are not hypothetical or schematic, but simple copies of the parts preserved in various specimens, some nearly perfect, also figured in the work. The form of his shield, and its details as to apertures, processes, &c. agrees with the view that it belongs to a fish most fully. It has not the remotest suggestion of crustacean affinities about it. Hence again, and by quite independent evidence, we have the piscine nature of *Pteraspis* indicated. Hence by paragraph 1 we have also additional warrant for considering *Cyathaspis* to be piscine.

Turning now to Dr. Künth's material, consisting of shields undeniably referable to my *Scaphaspis* and *Cyathaspis*, I find—if I may judge from his by no means carefully finished drawings—nothing which can be seriously put in the balance against the above incontestable demonstration of fish-like characters. If Dr. Künth's evidence did warrant his inferences as to crustacean affinities, it could not affect the facts cited above. We should have to regard the Pteraspicians as organisms combining the characters of fish and of Crustacea. But the evidence offered is really ludicrously insufficient. These shields occur often enough, crowded together in a slab of stone. Dr. Künth picks out two shields, accidentally brought into contact with certain most vague and irregular fragments placed near them—not by any means attached to them—and upon these raises a theory. The specimen, if we may judge by the figure, cannot really cause a moment's serious doubt in the mind of any person acquainted with the character of those figured in my monograph.

Whilst there is simply no scope for discussion upon the question of crustacean affinities raised by Dr. Künth, the possibility of the organic association in the same individual of the shields which I have assigned to the genera *Scaphaspis* with those assigned to *Cyathaspis*, and in other individuals with those assigned to *Pteraspis*, is altogether another matter. I myself carefully suggested this possibility, and mentioned the association of some of the forms, which suggestions Dr. Künth quotes from me. I do not think Dr. Künth's specimen bears any characters which should modify my view of the matter. There is nothing which leads to the notion that the two shields he figures were organically connected; and I have—dealing with an enormously larger body of material—pointed out in my monograph a number of facts which have led to an opposite conclusion.

A few months since I received from Herefordshire a specimen of a heterostracous shield, which is new, and is distinctly intermediate between *Pteraspis* and *Scaphaspis*. This I hope soon to figure and describe in the *Geological Magazine*. The rostrum is well developed, but is not distinctly marked off from the rest of the shield as in *Pteraspis*, nor are the cornual regions and apertures developed. This new specimen furnishes a timely support to the view that in *Scaphaspis* we have the same essential parts as in *Pteraspis* reduced or rather undeveloped.

E. RAY LANKESTER.

TO THE EDITOR OF THE ACADEMY.

December 10, 1872.

SIR,—In a review of Prof. Balfour's *Palaeontological Botany* in the *Academy* for October 1 (vol. iii. p. 370) I have referred to Prof. Oliver (*Natural History Review*, 1862) as having shown the greater probability of the American features of the European Tertiary vegetation having been derived from the east, rather than, with Unger and Heer, from the west. I wish to say, in answer to a communication that I have received, that I had fully in view Prof. Asa Gray's earlier (1859) and classical paper on the same subject. Prof. Oliver had however discussed the palaeontological evidence most in detail, and especially in reference to Heer's *Recherches sur le climat et la végétation du pays tertiaire* (1861), in which the Atlantis theory is vigorously maintained. For my purpose it was therefore most convenient to cite Prof. Oliver's essay.

W. T. THISELTON DYER.

Notes of Scientific Work.

Geology.

Vesuvius.—Mr. Wyndham, in a communication (December 2) to the Ashmolean Society of Oxford, pointed out the following results of

scientific interest from the late eruption. 1. Palmieri's view was confirmed that the visible effects are not the true commencement of the eruption; the initial period (the beginning of January in this case) being indicated by the shocks after a period of comparative quiet, evidenced by appropriate instruments. 2. Two minor craters formed below the Observatory were not explicable on Palmieri's theory as the result of eruptive force in the lava itself, but were, Mr. Wyndham believes, in connection with the principal eruptive source, with which they had the same periods of activity. 3. There was some evidence of the existence of diurnal maxima and minima. The eruption began at 3.45 A.M. on April 26; it attained its maximum at 3.25 on the afternoon of that day; and he thought there was also a maximum at 3 P.M. on the 27th. 4. The study of volcanic "bombs" was likely to lead to important mineralogical results; they often presented minerals externally which, it was clear, must have been formed by the action of heat in the presence of steam from the silicates of the lava and the constituents of the included rock.

The Coal Formation of Wyoming.—Professor E. D. Cope describes in a paper recently read before the American Philosophical Society, Philadelphia (*American Journal of Science and Arts*, December, p. 489), a large Dinosaurian, discovered during the past summer at Black Butte Station, on the Union Pacific Railroad, in Wyoming Territory. Professor Cope remarks that the determination of the affinities of this Saurian proves that these coal-beds belong to the Cretaceous series, and not to the Tertiary. Professor Cope was doubtless not aware that Mr. Meek had in 1871 referred Dr. Hayden's collections from this formation at Bitter Creek to the Cretaceous; and that he had also referred to it in 1870 the coal-bearing rocks of the same great series at Coalville, Utah, and at Bear River City, Wyoming. Indeed as long back as 1860 Mr. Meek, in connection with Mr. Engelmann, referred Captain Simpson's collections from these rocks to the Cretaceous. Two fossils only, from one part of the formation mentioned, were identified by Mr. Meek as Tertiary, but this was from a misapprehension in regard to the locality and stratigraphical position of the Hallville coal mines, which he supposed to be twenty to thirty miles farther eastwards, and at a much higher horizon; these fossils (the only species found at Hallville) are just such forms as might be either Tertiary or Cretaceous.

On the Last Great Glacial Period in New Zealand.—Captain Hutton read a paper on the last glacial period of New Zealand and the formation of the Wakatipu Lake at the Wellington Philosophical Society, September 17. In opposition to the views of Dr. Hector and Dr. Haast, he attributes the formation of the terraces so common in the valleys in the South Island to marine action, advancing the view that New Zealand has been submerged beneath the sea since the valleys were eroded by glaciers, the former extension of which he attributes solely to extreme elevation of the land during a preceding period, considering the view expressed by Dr. Hector that there has been a reduction of the area of land above the snow line by the erosive action of the glaciers as unnecessary and exaggerated. Speaking of the Canterbury plains, the author stated that Dr. Haast's sections show that they are nearly level in a line parallel with the coast between the Rangitata and the Waimakiri, and that the gravel formation wraps round the spurs of the hills at the same level that it has at the river gorges. He considers that these facts, and also the occurrence of vegetable deposits below the gravel of the plains, are readily explained by supposing these to be of marine origin, and quite inexplicable on the river formation theory. Another proof of recent elevation is the fact that the glaciers are now advancing and overriding their terminal moraines. The absence of striae on the rock surfaces the author considers to be a strong proof that the glaciers were extended during the Pliocene and not during a more recent period. The origin of deep lakes, taking Wakatipu as a type, and the sounds on the west coast were next discussed, with the view of proving that their formation is not due to subsidence or unequal depression, but only to the scooping out of the rock by glaciers.

Physiology.

Amount of Carbonic Acid excreted by the Skin in Man.—Dr. Hermann Aubert, of Rostock, contributes a paper on this subject to the last part of *Pföger's Archiv* (vol. vi. part xi.). The results obtained by previous experimenters upon this point are somewhat discrepant; Gerlach, in 1851, estimating it at 8 or 9 grammes in the twenty-four hours, from the whole surface of the body; Reinhard, in 1869, at only 2.23 grammes; while Scharling, in 1845, estimated it at 5.7 grammes. Aubert has made fresh experiments with modern appliances, and has placed the subject in a close box accurately adapted to the neck, but with tubes for the adit and exit of air attached to it; the latter, of course, being again connected with apparatus for the analysis of the air containing the products of the cutaneous transpiration. The general result at which he has arrived is that in the course of twenty-four hours a maximum amount of 6.3 grammes (97.272 grains), a minimum of 2.3 grammes (35.512 grains), and a mean of 3.87 grammes (59.7528 grains) of carbonic acid are eliminated from

the whole surface of the body below the neck. If to this be added that of the head, he thinks the entire quantity may be reckoned at 4 grammes, or a little more than one drachm or 60 grains. The temperature causes considerable variation; in the above experiments it was about 30° Centigrade, or about 86° Fahr. Experiments made directly with a view to determine the effects of temperature showed that at 29° 6 C. the amount of carbonic acid eliminated was 2.9 grammes; at 30° C., 3.24 grammes; at 31° 1 C., 3.78 grammes; at 31° 3 C., 3.84 grammes; at 32° C., 4.7 grammes; and at 33° C., 6.3 grammes. When compared with the total loss of carbonic acid in the twenty-four hours by the lungs, which amounts to 900 grammes, the proportion thrown off by the skin may be almost disregarded.

Circulation in the Spleen.—Olga Stoff and Sophie Hasse, of St. Petersburg, give an account of their researches on the circulation of the spleen in the *Centralblatt* (No. 48). Two views are entertained upon it. On the one hand, it is believed by many, as by Billroth, Schweigger-Seidel, and Kyber, that the blood path is a closed one, or, in other words, that the arteries break up into capillaries, which again reunite to form the veins. Others, as W. Müller, hold that the arteries discharge their blood into lacunar spaces, from whence the veins arise. Stoff and Hasse support the latter view; their experiments were made on the spleens of the pike, frog, salamander, duck, pigeon, fowl, sparrow, falcon, guinea-pig, rabbit, squirrel, and mouse, as well as of man, and they are decidedly of opinion that the smaller vessels break up into lacunar spaces into which the blood corpuscles pass.

Researches in Bone and Cartilage.—Under this heading, Dr. C. Heitzmann gives the results of many observations in the last part of *Stricker's Jahrbücher*, completing that journal for the year 1872. He describes carefully the character of the cells of healthy bone, for the examination of which he recommends the lower part of the femur of the rabbit both fresh and preserved in Müller's fluid. The canaliculi and their anastomoses, he says, can be well seen in portions of bone from which the lime salts have been removed by lactic acid. He enters fully into the microscopical characters of inflamed bone. In such bone the solution of the calcareous salts takes place first in the immediate vicinity of the vessels. The areas free from lime have sharply defined contours, which often correspond to the limits of the bone-cell territories, though they are often also independent of them. In the further progress of the inflammation, the cell-bodies enlarge, and their nuclei divide, the matrix at the same time melting down, both along the contours of the vascular canals and in the centre of the bone quite independently of the vascular canals, leading to the formation of cavities. Lastly, a differentiation of tissue takes place of the substance of the enlarged and now free bone-cells, part forming a yellow homogeneous, highly refractile substance, and another part a colourless, finely granular substance. In regard to the formation of blood in inflamed bone, he coincides with the statement long ago made by Rokitsanski, that in certain diseased conditions processes take place in molten cells which lead on the one hand to the formation of capillary vessels, and on the other to blood corpuscles. From his researches on hyaline cartilage, he finds that the bodies of the cartilage cells possess radiating processes which by their anastomoses with each other form a delicate varicose network in the matrix. These processes are very broad and large at the points of transition of the hyaline cartilage into the striated fibrous cartilage and into the periosteum. He then describes at length the effects of injuries to cartilage.

The Kombé Arrow Poison.—This poison is obtained from the *Strophanthus hispidus*, and is used by the natives of Africa. Dr. Livingstone gives some account of it in his *Narrative of an Expedition to the Zambesi and its Tributaries*. In hunting, he says, the natives follow the game with great perseverance and cunning. The arrow making no noise, the herd is followed until the poison takes effect and the wounded animal falls out; it is then patiently watched till it drops, a portion of meat round the wound is cut away, and all the rest is eaten. The physiological characters of the poison have recently been investigated by Dr. Fraser, of Edinburgh. The plant has been examined by Prof. Oliver, of Kew, who has named it *Strophanthus hispidus*, and finds that it belongs to the poisonous order *Apocynaceae*. Dr. Fraser concludes that the poison acts primarily upon the heart, and produces as the final result of this action paralysis of that organ, with permanence of the ventricular systole. Pulmonary respiration continues in cold-blooded animals for several minutes after the heart is paralysed. The striped muscles of the body are acted on, twitches occur in them, their tonicity is exaggerated, and finally their functional activity is destroyed; the muscles being hard, and soon after acid in reaction. These changes are accomplished subsequently to the final effect upon the heart, and are the result of a direct contact of the substance with the muscles themselves. The reflex function of the spinal cord is suspended soon after the heart is paralysed, but the motor conductivity of the spinal cord and of the nerve trunks continues after the striped muscles of the body are paralysed. The lymph hearts of the frog continue to contract for many minutes after the blood heart has been paralysed.

Botany.

Fertilisation of Abutilon.—Fritz Müller has described the fertilisation of different species and varieties of *Abutilon*, which are of special interest from the facility with which hybridization occurs in that genus. The author's observations were in opposition to those of Gärtner that "artificial fertilisation of pure species generally produces a smaller number of seeds than natural fertilisation." Müller found, on the other hand, with several species which he was able to investigate, that in the natural condition, although the stigmas were freely pollenised by the agency of insects, yet a comparatively small number of seeds came to perfection, while artificial pollenisation almost universally produced a much larger number of seeds. In another point also Müller's observations are at issue with those of Kölreuter, Herbert, and Gärtner. These three observers all maintained that, when a pistil was pollenised simultaneously by the pollen of two different foreign species, both were not efficacious, but only the one which had the closest relationship to the female plant. Müller, on the other hand, records, without hesitation, the simultaneous production of hybrids between one species and two others, the pollen of which was applied to it at the same time.

Structure of Parnassia.—Gris, whose recent death is a heavy loss to French botany, recurs (*Mém. de la Soc. de Cherbourg*, tom. xvi.) to the question of the peculiar structure and arrangements of the stamens in *Parnassia palustris*. A large number of botanists, including Humboldt, De Candolle, St.-Hilaire, and Le Maoût, have stated that these are specially contrived for self-fertilisation. C. C. Sprengel had, however, pointed out as long ago as 1793 that the indications are rather the reverse, the anthers casting their pollen outwardly, so that it is almost impossible that any of it can fall on the stigma, which, moreover, is not mature until a considerably later period—a view supported by Vaucher and by A. W. Bennett (*J. Linn. Soc. Ap. 1869*). Gris entirely confirms this latter view. He also supports the statements of the last-named writers that the stamens gradually lengthen while in close contact with the pistil, and do not in turns approach it, like those of *Saxifraga*, as is usually stated in botanical text-books.

The Origin of the Spanish Chestnut. Ettingshausen discusses (*Sitzungsb. der k. Akad. der Wiss. of Vienna*, 1872 div. 1) the ancestry of *Castanea vesca* (the sweet or Spanish chestnut). In the fossil flora of Leoben, not only the leaves, but even the male catkins, of a species of *Castanea* are found, in such a state of perfection that the anthers can be recognised. The form of the leaves, &c. being very variable, these have been described as several species of Cupuliferae from the Tertiary formations. Of *Castanea atavia* (Ung.) we have also remains of the spiny husk and of the fruit. The leaves of this species pass over gradually into those of *C. vesca*, those obtained from the newer formations showing a gradual approximation to the present type; and hence our present species appears to be a lineal descendant from the *C. atavia* of the Tertiary. *C. Ungerii* (Heer) from Greenland, and *Fagus castaneaefolia* are the same species, which must have had at one time a very wide distribution. Seventeen nature-printed plates illustrate the variation in the leaves.

Fossil Plants of the American Tertiaries.—Lesquereux, in a supplement to the fifth report of the U. S. Geological Survey, points out (*American Journal of Science and Arts*, 1872, p. 495) the close connection between the Tertiary American Flora and that at present existing. This is especially indicated by the fossil plants of the Green River station (referable to the Upper Miocene). Besides species of *Salix*, *Myrica*, *Rhus*, and *Ilex*, intimately related to species now existing, there is an *Ampelopsis* and *Morus*, indicating by their marked affinity the origin of the existing widely distributed Virginian creeper and red mulberry.

Peloria in Labiatae.—Peyritsch continues (*Sitzungsb. der k. Akad. der Wiss. of Vienna*, 1872) his researches on abnormal regularity in the flowers of Labiatae. The preponderating occurrence of quaternary types in the apical and lateral regular flowers he considers to be in contradiction to the assumption of a primary quinary type in this order. The assumption that the four stamens and the constant reversion to fours in the pelorian flowers represent an original quaternary type has the advantage of simplicity; and the number and position of the flower-leaves is then in accordance with the almost invariable arrangement of the leaves and bracts, which only on the rarest occasions depart from a cruciform and decussate position.

Influence of Foreign Pollen on the Parent Plant.—Asa Gray adds (*American Journal of Science and Arts*, December 1872) another to the already numerous instances which have placed this mysterious phenomenon beyond dispute. An apple (spitzenberg) produced a fruit half of which was (at least as to the surface) spizenberg, the other half russet. A tree of the latter fruit stood about two hundred yards off. The division into two exactly equal parts is quite unexpected; as the styles and carpels were five, we should have expected the division to be into fifths. Moreover, the action of the pollen in this case is, morphologically, on the calyx, not upon the pericarp.

Stamens replacing Ovules.—Godron (*Mémoires de la Société de Cherbourg*, vol. xvi. p. 120) has described a double-flowered *Petunia* in

which the ovules were replaced by anthers. The pistil occasionally also presented as many as three, four, or five carpellary leaves instead of two, the normal number. The flowers of *Petunia* become double by the conversion of stamens into petals; a certain number of the stamens, however, usually continue polleniferous, and their pollen is stated, when used to fertilise single-flowered plants, to determine the production of an abundant progeny of plants with double flowers and varied colours.

Remarkable Aroid.—Mr. Bull has flowered (for the first time in the Old World) at King's Road, Chelsea, *Godwinia gigas*, the remarkable Aroid brought from Nicaragua by Dr. Seemann. It only produces a single leaf, and after this has died off the inflorescence makes its appearance. In the middle of December the dark chocolate-purple spathe was 1 foot 10 inches long, and was supported on a mottled peduncle measuring 1½ foot.

Structure of the Flowers of Welwitschia.—Professor M'Nab communicated to the Linnean Society (December 19) his observations on the development and structure of the flowers of *Welwitschia* which he had studied in specimens communicated to him by Dr. Hooker. He considered the male flower to consist of four series of opposite and decussating parts. The two outer form a perianth, which is succeeded in order by two primordial stamens, each of which subsequently branches into three, and by two carpels, between which is the undeveloped extremity of the axis. In the female flower the two inner parts of the perianth, the two primordial stamens, and the two carpels are not developed. The extremity of the axis which becomes the "nucleus" of the naked ovule is surrounded ultimately by a circular integument. Strasburger differs from Professor M'Nab in considering that the stamens form two whorls, one whorl consisting of two stamens, the other of four. This conclusion, after re-examining his specimens, Professor M'Nab is unable to agree with, as also with Strasburger's view, founded on the analogy with *Ephedra*, that the outer leaves of the female flower are carpels. *Welwitschia*, he considers, makes a very close approach to the Argiosperms, the axis of the flower ending in a mass of tissue which in the female is the terminal ovule.

New Publications.

- BAILLON, H. The Natural History of Plants. Translated by M. M. Hartog. Vol. II. Reeve.
- BOISSIER. Flora Orientalis. Tome II. Geneva: Georg.
- FLAMMARION, C. Histoire du Ciel. Paris: Hetzel.
- FRISCHAUF, J. Absolute Geometrie. Leipzig: Teubner.
- HAECKEL, E. Die Kalkschwämme. I.-III. Berlin: Reimer.
- HANKEL, W. G. Elektrische Untersuchungen. 10. Abhand. üb. die thermoelektr. Eigenschaften d. Aragonites. Leipzig: Hirzel.
- HARTSEN, F. A. Principes de Physiologie, avec une étude sur l'instinct et sur la nature du génie. Paris: Savy.
- HOEFER, F. Histoire de la botanique, de la minéralogie et de la géologie depuis les temps les plus reculés jusqu'à nos jours. Paris: Hachette.
- KNOP, A. Studien üb. Stoffwandlungen im Mineralreiche, besonders in Kalk- u. Amphiboloid-Gesteinen. Leipzig: Haessel.
- KOCH, L. Abnorme Aenderungen wachsender Pflanzenorgane durch Beschattung. Berlin: Wiegand und Hempel.
- MARTINS, Ch. Sur la répartition des pluies dans le département de l'Hérault pendant les années 1870 et 1871. Montpellier: Boehm.
- MEYER, H. A., und MÖBIUS, K. Fauna der Kieler Bucht. 2. Bd. Die Prosobranchia u. Lamellibranchia. Nebst e. Supplement zu den Opisthobranchia. Leipzig: Engelmann.
- MEYER, L. Die modernen Theorien der Chemie u. ihre Bedeutung f. die chemische Statik. 2. Aufl. 2. Hälfte. Breslau: Maruschke und Berendt.
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- PANCERI. Études sur la phosphorescence des animaux marins. Paris: Martinet.
- QUENSTEDT, F. A. Petrefactenkunde Deutschlands. I. Abth. 3. Bd. Echinodermen. 1. Heft. Berlin: Fuess' Verlag.
- RECLUS, E. The Ocean, Atmosphere, and Life. Being the Second Series of the Phenomena of the Life of the Globe. Translated by the late B. B. Woodward. 2 vols. Chapman and Hall.
- RUSSOW, E. Vergleichende Untersuchungen betr. die Histologie der vegetativen u. sporenbildenden Organe. St. Petersburg.
- SAGOI. Légumes et cultures potagères de la Guyane française. Paris: Donnad.
- SCHABUS, J. Grundzüge der Physik. Wien: Gerold's Sohn.
- TAMIN-DESPALLES, O. Alimentation du cerveau et des nerfs. Paris: Delahaye.
- WILD, H. Études météorologiques. St.-Petersbourg.

History.

ROLLS SERIES AND CALENDARS OF
STATE PAPERS.

Higden's Polychronicon. Vol. IV. Ed. J. R. Lumby.

THE value of this edition consists in the two Old English translations which accompany the Latin text, that of Trevisa (born 1342, died 1412), and that of the Harleian MS. 2261, for they represent to us the English of the fourteenth and fifteenth centuries. A very short extract will show the difference. "There burgeys were i-woned to stonde and loke aboute and telle here mery tales. Lucanus seith, in the feelde that hatte Marcius, at the grete feste, i-made sette the hedes of gentil men that were i-slave in stede of messes uppon the mete bordes. Marius was so cruel that meny men hadde levere slee hem self than come in Marius his honde. Therefore Catulus the consul drank venym, and Merula, Jupiter his owne bisshop, kutte his own veynes, and bledde anon to dethe." (Trevisa.) "... where the citesynnes were wonte to sitte and talke. And as Lucanus reherseth he causede the hedes of the noble men of Rome, in a feste that he made, to be served to hym and to be sette on the table. The cruelenesse of Marius was soe grete that many men hade lever to sle theym selfe then to putte theyrne in his mercy. Wherefore Catullus the consul drunke poyson, and Merula the byshop Jovialle bledde to dethe thro the kyttenge of a veyne." (Harl. MS.) Much of the preface is perhaps superfluous, as a discussion of the relations of the original sources to each other is needless when we only want an edition of the Universal History popular in England in the Middle Ages, with the two accompanying translations. A very full English vocabulary ought to accompany the last volume of the work.

Letters and Papers, Foreign and Domestic, of the Reign of
Henry VIII. Vol. IV. Part II. Ed. J. S. Brewer.

THE preface and index to volume iv. are yet to come, in a third part, so that as to the second part we need say little more than that it contains the papers of the years 1526-1528. We have now therefore reached the times of the Divorce. There are many details about the founding of "Cardinal Colleges" at Oxford and at Ipswich by Wolsey, and about the monasteries suppressed for that purpose, lists of receipts from lay and clerical subsidies, the detail of the victualling of Calais, a number of papers showing the popular feeling, and much other valuable material. The vast mass of despatches to and from the Emperor and Francis I. and the Pope in these eventful years we must reserve for consideration till the editor gives us his long expected preface. The abstracts in all the series are now given somewhat more fully than at first, much to the advantage of the historical student.

Calendar of State Papers, Domestic Series, of the Reigns of Eliza-
beth and James I. Addenda, 1580-1625. Ed. Mary Anne Everett
Green.

It shows the need of a new arrangement of the Records that such an amount of additional documents should have been discovered. The searches have now, however, "been so exhaustive as to leave no probability of further discoveries of importance. The Domestic Calendars may therefore be considered as completed from 1547 to 1625." The Historical Commission may, however, still find much historical matter, especially correspondence, of importance—since in old days leading statesmen often kept the State Papers of their office,

and some of their descendants may do as Lord Shaftesbury has lately done, and give their ancestors' papers to the State again. The contents of this volume are of course very miscellaneous. There are a number of papers about Jersey and Guernsey and their old customs. Very many documents about the Roman Catholics at home and abroad are calendared, and the editor has given fuller lists of the names than before. There is a "Statement, addressed by Sir Fras. Bacon to the King, of the Chancery cause, Giles and Eliz. Warren v. W. Waller, relating to the lease of a house, which has been seventeen years in Court." New College men may be interested in a suit by Hum. Wickham to get his two younger sons admitted to Winchester, and thence preferred to New College, and there admitted as of the blood of the founder. Secretary Walsingham's apothecary sends him medicines of a curious character; part of a unicorn occurs among them "for resisting poison which may be tried on animals to whom arsenic has been given." "he has also silver medals, idols of Isis taken from m.n. mies." The index is very good, e.g. many curious articles are mentioned under "Books," "Oxford," and similar headings.

The Calendar of Malmesbury.

IN Hampson's *Medii Aevi Kalendarium*, i. p. 435, *seq.*, a calendar is given, from the Cotton MS., Titus D. xxvii., which evidently belonged to a Saxon monastery, but which Hampson could not further identify. But the entries and obits show that it was the *Calendar of Malmesbury*, e.g. at June 5 and 10 are "dedicatio Basilicae Sanctae Mariae," and "dedicatio monasterii Salvatoris Mundi," which prove the point; see William of Malmesbury's *Gesta Pontificum*, v. § 197; and similarly the mention of Abbots Aelfwine and Byrhtold; and the burial of Wulpnoth, at October 18. The calendar was composed just after 1012, as the mention of S. Alphege shows; but the obits inserted range late down in the eleventh century. Hampson has only given part of the obits. It would be worth the while of the Wiltshire Archaeological Society to copy and publish it with full annotations. At January 3, Boca is a misreading for Boia. Brother Aelsinus, who wrote it, uses an easy cipher, formed by substituting the following consonant for each vowel, e.g. Aelsknxs mf scrkp-
skt = Aelsinus me scripsit. A complete volume of mediaeval English calendars, carefully edited, would be very instructive.

C. W. BOASE.

The History of Sicily to the Athenian War; with Elucidations of
the Sicilian Odes of Pindar. By W. Watkiss Lloyd. With a Map.
Murray.

MR. LLOYD's name is so well known in connection with his reconstructive criticism of the accounts left us as to the grouping of the figures in ancient works of art that a parallel attempt to reconstruct the grouping of the ideas in Pindar's Epinician Odes, by means of a careful study of the varied relations of the Sicilian colonies with the mother country, is peculiarly welcome. He begins with a sketch of the earliest views of the Greeks about Sicily, as represented in the *Odyssey*. When the Greeks on their way back from Troy attempt to round Cape Malea, the fatal north winds carry them away, some down to Egypt, some on a long voyage among the wonderlands of the West. Men are so fond of localising old national stories that it is no wonder if various spots on the shores of Italy and Sicily were soon identified with those visited by Ulysses. Mr. Lloyd well points out that the account of Scylla and Charybdis, however exaggerated, is but a heightened study after the natural scene, and that this shows a certain amount of local

knowledge which must have been acquired from the information supplied by actual voyagers, Greek or Phœnician. Indeed, it is not improbable that the early discoverers of the rich lands of the West purposely exaggerated the dangers and horrors of the route to keep away competitors from the silver mines of Spain, or the tin and amber countries of the North. The account, too, of the cannibals does not now seem so strange after the late discoveries of the caves of such tribes on several coasts of the Mediterranean. The Cyclops Polyphemus, "vast as a mountain in bulk that peers above all others" (*Odys.* ix. 191), who throws huge rocks into the sea, is partially identified by Mr. Lloyd with a personification of Aetna as a volcano, and he ingeniously works out this idea in explaining the story of his struggle with the stream-god Acis for the sea-nymph Galatea, since the lava often injures the rivers. But we may remark on this that Aetna is believed to have been, like Vesuvius, long dormant, and its first eruption in historical times is dated, somewhat vaguely, "in the time of Pythagoras," some time after the Greek colonies had been founded in Sicily, and Humboldt (*Cosmos*, i. note 213) refers *Odys.* xii. 68, 202, 210, to Stromboli—*πρὸς τ' ὀλοοῖο θιέλλαι*. But allowing that the poets of Homer's time had a vague knowledge of Sicily, the voyage further west admits of no identifications. Scheria, the land of the Phœacians, cannot possibly be Corcyra; Welcker has even ventured to identify it with Britain. It is curious that the later Greeks of Constantinople knew so little of Britain that Procopius' island "opposite to the land where the ghosts are ferried across the straits" is as unreal as the realm of Alcinoüs.

From this discussion, our author proceeds to examine the accounts of the foundation of the successive Greek colonies, since Pindar's frequent allusions to the ancestry of his heroes and their connection with the leading heroic and sacred families of the mother countries are inexplicable without a minute knowledge of these subjects. Dissen did great service in pointing out that Pindar did not introduce legends arbitrarily into the Odes, but that traditional connection with the native country or concerns of the victor was an indispensable characteristic. Yet even Dissen did not always succeed in tracing this out in detail. Thus in an ode written for Hiero, descendant of a colonist from the isle of Telos (near the Triopian promontory of Caria), who was an hierophant of the Chthonian or subterranean gods (the very name Hiero probably alludes to the sacred functions of this family), the references to Thessalian stories are explained by Mr. Lloyd as due to the early connection between Thessaly and Caria in religious matters; and it is this Thessalian connection that brings in the traditions of Lacereia and the Centaurs, and probably also the set of traditions as to Asclepius (whose worship at Cos and Cnidus was so renowned), since Pindar places the birth of the god at Lacereia, on the Baebian Lake, and he was educated by Cheiron on the Magnesian mountains. In fact, the feeling of colonists for the mother-land was nowhere so intense as among the Greeks, independent as the colonies so generally were in a political sense. A prize at the Olympic or Pythian games, a recognition by the united representatives of the Hellenic race, an ode from one of the great poets which would be to them fame and immortality, was to them of inestimable value; they had thus won, or recovered, or vindicated, their place among those noble clans to whom Pindar ascribes all excellencies of mind and body as theirs by hereditary right. And this brings us to another point in which Mr. Lloyd seems right as against the commentators. Many of the moral remarks are often supposed to be intended as admonitions to Hiero and others, good advice, that is, to a tyrant, warnings against oppression, arro-

gance, avarice, and the like. But Mr. Lloyd points out that it would be the height of inconsistency to suppose that Pindar could introduce into an ode intended for public performance, and intended to be a glory and delight for the victor, any such reflections either upon Hiero or upon his friends or those he affected and favoured, as could not but be distasteful and disagreeable to him, and perhaps to most of those who were present. On the contrary, the poet often seems to be guarding him from cavil or open attack, speaking indirectly as of attacks that had been made on himself. Envy that assails the victor has not spared the poet, and he denounces his own calumniators with violence to make colourable the keenness with which he apprehends the injustice of like kind done to his patron—so he introduces occasion for enunciations as to how malice may be fairly coped with, and mischief turned back upon its authors.

The work is thus mainly an account of the great families of Gelo and Hiero, which took the lead in the early times of Sicily, and of the odes of Pindar written in their honour; each part of the discussion throwing light on the other. All the Sicilian odes are translated, and have separate introductions; and notices of the architecture and coinage of the island are, as we should expect from our author's previous writings, often brought in with good effect to illustrate his main subject. And we cannot but express our gratitude for his abstinence from anything like an array of learned references, and for the clear and pleasant English of the book.

C. W. BOASE.

Contents of the Journals, &c.

Bulletino dell' Istituto, November, describes the remains of the Aedes divi Julii, just discovered close to the temple of Castor and Pollux in the Forum. It had a platform in front (in which the beaks of the ships taken at Actium were inserted), from which Augustus spoke the funeral speech on his sister Octavia, and Tiberius that on Augustus.—Some inedited inscriptions from Athens follow, and a very curious Doric one from Selinus, which shows that the temple in which it was found was an *Ἀπολλώνιον*. It begins, *Διὰ τοὺς θεοὺς τοὺςδε νικῶντι τοὶ Σελινούντιοι*, and then follows the list of Sicilian gods.

Gött. gel. Anzeigen, November 6.—Geiger continues his notices of recent works on the Humanists, this time taking Beatus Rhenanus, the friend of Erasmus, and similarly disposed towards the Reformation; and the whole of the number of December 4 is devoted to Durand de Laur's *Érasme, précurseur et initiateur de l'esprit moderne*, of which the reviewer judges somewhat unfavourably.—November 6 also contains a second notice of Hehn's *Kulturpflanzen und Haustihere* (already reviewed at length in the *Academy*, vol. iii. pp. 309-313), with especial reference to the physical circumstances that condition the growth and spread of the various plants mentioned, e.g. as to the early existence of the chestnut in Europe.—Friedländer's *Codex Traditionum Westfalicarum* and Grotefend's *Handbuch der historischen Chronologie des deutschen Mittelalters und der Neuzeit* are also reviewed; the latter does for Germany what Sir H. Nicolas' *Chronology of History* does for England.—November 20.—Sloet's *Urkundenbuch* of Guelders is reviewed by Waitz; and Ewald's *Die Eroberung Preussens durch die Deutschen*, by Perlbach; and Voigt's *Die Geschichtschreibung über den Zug Karls V. gegen Tunis* (1535).—November 27 has interesting notices of Tieftrunk's book on the opposition of the Bohemian Estates to Ferdinand I. in 1547; of d'Ovidio's attempt to show that the nouns of the Romance dialects derive their oblique case not merely from the Latin accusative, but from other Latin cases as well, and of Grundtvig's *Danish National Ballads*.

The *Mémoires de l'Académie des Sciences morales et politiques* de l'Institut de France, tome xiii., contains historical notices on the lives and works of Savigny, de Tocqueville, and Victor Cousin, by Mignet, and a number of valuable reports on the competing works examined in the various sections of Philosophy, Morals, Political Economy, Jurisprudence, and History. One of the reports in the latter is by Guizot, on the subject of the States-General. The volume is worth especial notice.

The companion volume, *Recueil des Discours, Rapports et Pièces diverses lus dans les Séances de l'Académie française, 1860-1869*, deuxième partie, contains (1) The Discours de Réception from 1866, e.g.

of Prevost-Paradol on succeeding Ampère—to which Guizot replies ; of the Abbé Gratry on succeeding Barante—to which Vitet replies. (2) The Discours sur les Prix de Vertu. (3) Villemain's reports on the competitive works from 1866. (4) Papers by members of the Academy ; two very interesting ones by Prevost-Paradol.

New Publications.

- CHRONIKEN, Die, der deutschen Städte vom 14. bis ins 16. Jahrhundert. 10. Bd. A. u. d. T. Die Chroniken der fränkischen Städte. Nürnberg. 4. Bd. Leipzig : Hirzel.
- CRAMER, Kreisr. J. Die Grafschaft Hohenzollern. Ein Bild süd-deutscher Volkszustände. 1400-1850. Mit einer color. (lith.) Karte und 4 Tab. Stuttgart : Kirm.
- GÉRARD, Charles. Les Artistes de l'Alsace pendant le moyen-âge. Tome I. Colmar : Barth.
- KÖHLER, Pfr. K. F. Luther's Reisen und ihre Bedeutung für das Werk der Reformation. Nach Quellen bearbeitet. Eisenach : Bacmeister.
- KRAFFT, A. H. Chronik von Liegnitz. 2. Bd. 2. Abth. und 3. Bd. Liegnitz : Krumbhaar.
- LOCHNER, G. W. N. Geschichte der Reichsstadt Nürnberg zur Zeit Kaiser Karls IV., 1347-1378. Berlin : Lobeck.

Philology.

La Légende athénienne. Étude de Mythologie comparée. Par Émile Burnouf, Directeur de l'École française d'Athènes. Paris : Maisonneuve et Cie.

In this "Study of Comparative Mythology," M. Burnouf has done good service to a science of very modern growth, by bringing to bear upon it the light afforded by careful and minute local research. His position at Athens has given him unusual facilities for the task, but it is to be hoped that others will be found to follow his example, as opportunity may be given them, in other parts of the world, so that the theoretical conclusions of the comparative mythologist may, by degrees, be thoroughly tested, as well as illustrated, by observing the modifications which the various myths have undergone from local considerations, and the influence which they have exercised on local religion.

The myth which naturally plays the most prominent part in the research of M. Burnouf is that of Athene, the patron goddess of Athens, and especially, as he shows, the tutelary deity of the Acropolis ; which contained at least four shrines dedicated in her honour, as well as the three famous statues of Athena Polias, Athena Parthenos, and Athena Promachos. Starting with complete acquiescence in the views of Professor Max Müller as to the origin of the myth, which identifies Athene etymologically with *Ahanâ*, the Aurora of the Veda, and looks upon the goddess as the impersonation of the dawn, he works out its details with considerable minuteness, in respect both of the leading characteristics of Athene herself, and of her relations, on the one hand, with Zeus, her father, the heaven, from whose face the dawn appears to spring, and on the other with Poseidon, the producer of water. This latter god is in India, as in Arcadia, essentially the god of the waters of heaven, and so closely akin to, and sometimes scarcely distinguishable from, Zeus Ombrios ; but in Greece he is generally connected with what to the Greeks was the more important realm of water, and so to them is the Ocean God. It is, however, in the former capacity that he comes especially in contact, or rather in collision, with Athene : the special enemy of the dawn being naturally the monarch of the clouds. To sum up the legend in M. Burnouf's words :

"In respect of the daughter of the heaven, at the side opposite the horizon, there is another great deity who presides over the celestial ocean. The world is in dispute between these two powers : the one brings light and activity to the living beings which it contains ; the other strikes the celestial mountains (*i. e.* the clouds), makes the waters

gush out, and opens the way to the divine horse whose movements Aurora controls. After the struggle, the god that causes the waters to flow communicates fertility to the earth, which, becoming his bride, gives birth to the plants and animals. So Aurora presents herself daily at the gates of heaven ; peaceable or ready for combat, according as the sky is pure or cloudy. If it is pure, she is calm, serene, triumphant. If it is cloudy, she is a warrior driving far before her the deity who governs the waters, and forcing him to show his divinity by the blows which he endures, or the blessings which he bestows."

In all this, M. Burnouf is playing the part of a comparative mythologist pure and simple. It is true that he illustrates his points by reference to varieties of the legend as found at Corinth, Troezen, or elsewhere ; and especially by contrasting the myth of Poseidon as it occurs in Arcadia with the modification of the same legend at Eleusis. In the former he is the cloud-god, wedding Demeter-Errinnys, herself a deity of heaven, probably to be identified with the dawn. In the latter Demeter has become the earth, and her consort, the father of the mysterious damsel, is Zeus, the empire of rain being now transferred to him from Poseidon, whose kingdom is there found in the watery plains of ocean. But all this might have been worked out from materials accessible at a distance from the scene of action : and the especial value of M. Burnouf's book lies rather in his careful and ingenious explanation of the facts of Athenian topography with reference to the myths.

Of this, the most striking example is found in his second chapter, on the astronomical facts of the Acropolis. It had been observed by previous writers on the subject, though by comparatively few of them, that, while all the temples on the Acropolis had in the main an easterly direction, yet none of them face due east, and, moreover, that hardly any two of them have their axes parallel to each other. Previous maps and plans, with the exception of those by Mr. Penrose, are singularly inaccurate on this point ; and even he looks on the irregularity as interesting rather from the great beauty which it produces, in not only obviating the dry uniformity of so many parallel straight lines, but also giving exquisite varieties of light and shade, than because it is based on any scientific principle.

M. Burnouf, however, has endeavoured, and with considerable success, to show that this variety of direction is not arbitrary, but dependent on a principle similar to that which guides the orientation of Christian churches, and that the object in view was that the portico of each temple, and consequently the image of the deity within its shrine, should face the dawn on the day of the chief festival which it was intended to commemorate. It would have been more satisfactory if he could have proved his point with regard to the other temples also ; but in respect to the Parthenon, the most illustrious of them all, his observations coincide remarkably with his theory.

He shows in the first place that, while the Grecian States generally regulated their year in accordance with one or other of the solstices or equinoxes, at Athens the summer solstice was the only one of these four dates which could reasonably be selected as the starting-point for the year, since on that day only of the four was the actual sunrise visible from the Acropolis. On all the others it was hidden by the intervention of some neighbouring height ; but on that day it was visible through a gap between Pentelicus and Hymettus, so little higher than the Acropolis that the defect was approximately corrected by refraction. On the shoulder of Hymettus, at this lowest point, there is at present the monastery of St. John Kunigos, on the site of an old temple of Apollo Kunios (which surname M. Burnouf elsewhere shows to mean "the son of the Sun"), and a line drawn from the altar of Athene Parthenos to the sunrise at the summer solstice in 445 B.C., the presumed date of the

foundation of the present Parthenon, would exactly have passed through the site of this temple. The inference that this consideration decided the site of the altar of Athene is confirmed by the fact that another temple, of Zeus Hymettios, is known to have stood on the crest of Hymettus, to the south-east of Athens, exactly in the line between the altar and the sunrise at the winter solstice; and even more remarkably by an alteration in the site of the Parthenon itself from that of the older building on which it approximately stands. The change of position was noticed by Mr. Penrose and other travellers, but has hitherto been unexplained. M. Burnouf shows that it was rendered necessary by the variation of the angle formed by the ecliptic with the equator in the interval between the two buildings; since it was necessary to move the altar of Athene, and consequently the temple, so far to the north that the line between it and the sunrise at the summer solstice should still pass through the lowest point of Hymettus. Acting on this hypothesis, he finds that the alteration of position exactly corresponds to the variation of angle between 445 B.C. and 554 B.C., the date of the second administration of Peisistratus, to which time Mr. Penrose and others had already attributed the older building on architectural grounds.

But though these facts account satisfactorily for the position of the altar, yet we are met with a difficulty on finding that the temple, though situated directly behind the altar, so that a line which is actually traceable from the statue of the goddess to the altar passes through the centre of the portico, does yet not face the actual dawn, its axis forming an angle of $6^{\circ} 55'$ with the line from the altar to the temple of Apollo Kunios. This discrepancy is explained by M. Burnouf by the fact that the angle formed by the axis of the temple with the due east and west line exactly corresponds to the least zenithal distance of the sun in 445 B.C.; so that the direction of the temple is really determined by an independent consideration, but is equally referable to local solar phenomena.

In this way M. Burnouf confirms the belief, derived from philological considerations, that the worship of Athene is closely connected with the dawn; and shows that to that fact we are to trace the peculiarities in the position of at least her principal temple at Athens. If the data on which he grounds his arguments are not extensive enough to be absolutely conclusive, they are at least suggestive of further investigation; and we may hope that much light will in future be thrown upon the labours of the comparative mythologist, by similar intelligent contemplation of the myths in the concrete form which they assume in individual localities.

J. R. KING.

Rig-Veda-Saṁhitā. The Sacred Hymns of the Brahmans; together with the Commentary of Sāyaṇāchārya. Edited by F. Max Müller, M.A. Volume V. Published under the patronage of the Rt. Hon. H. M.'s Secretary of State for India in Council. Allen, 1872.

The Taittirīya-Saṁhitā. [Herausgegeben von Albrecht Weber. *Indische Studien*, Vols. XI. and XII.] Leipzig: 1871-72.

SINCE 1846, when Dr. R. Roth, now professor at Tübingen, published his essays on the *Literature and History of the Veda*, and thereby introduced a mass of new and brilliant light into the comparatively neglected field of enquiry opened through the researches of Colebrooke and Rosen, that branch of Hindu writings has received a steadily growing amount of attention at the hands of European Sanskrit scholars. To the general public, whose interest in Oriental literature has at no time been of a very enthusiastic kind, such historical and linguistic problems as are connected with the Veda, and the solutions proposed from time to time of some

of these, may seem but little attractive; but the student who deems it not unworthy of a lifetime to attempt to decipher the history of his race as reflected in its language, its thoughts, and its manners, and he who makes the origin and growth of language itself the sole object of his study, have long since learnt to consider the Veda as one of the primary documents for their enquiries.

The collection of hymns which constitutes the *Rig-Veda-Saṁhitā*, on account of its greater antiquity and purely literary character, has naturally claimed the lion's share of critical examination; and ever since Friedrich Rosen had published his *Rigvedae Specimen* (London, 1830), and his edition and translation of the whole of the first *Ashtaka*, consisting of 121 hymns (1838), there was among Sanskrit students and comparative philologists a growing demand for the entire text of this collection. At the same time the correct interpretation of these hymns was found to offer considerable difficulties to those whose knowledge of Sanskrit was derived from the literature of later times, when the dialect in which they were composed had in some degree become obsolete. It was, therefore, highly desirable that the aid afforded by native commentators should become generally accessible; the more so as there seemed reason to believe that the explanations offered in modern comments were but the latest redactions of the traditional exegesis carried on from remote ages through an unbroken succession of teachers. This meritorious, though arduous, task was accordingly undertaken by Dr. Max Müller, who, in 1849, after five years spent in collecting materials, published the first volume of his edition of the Rig-Veda hymns, together with what seems to be the only complete commentary preserved to our days, the *Bhāṣya* of Sāyaṇāchārya. The editor's confessions in his *Chips from a German Workshop* have since made us acquainted with the circumstances under which this magnificent work was permitted to see the light, thanks to the enlightened patronage of the Court of Directors in former, and the Secretary of State for India in our own, days. Three more volumes followed in 1852, 1856, and 1862 respectively; each looked forward to most eagerly by Sanskrit scholars, and imparting fresh vigour to Vaidik researches. After a more protracted interval the fifth volume, containing the whole of the ninth and about one-fourth of the tenth, or last, books, has now been issued. This delay, as Professor Müller informs us, has to be accounted for partly by the new course his studies had to take after his appointments successively to the chair of Modern European Literature and that of Comparative Philology in the University of Oxford; partly by a natural desire on his part to make known the results of his enquiries, and to contribute his share to the interpretation of the first outpourings of the Aryan mind. Besides, the difficulties which attend an edition of Sāyaṇa's comment increase considerably towards the end of the work, where omissions and mistakes become more and more frequent, and the restoration of the correct readings often hopeless. These circumstances combined seem even to have for a time endangered the completion of the work. So unsatisfactory a termination of this undertaking would certainly have been regretted by all who take an interest in these studies. Long as European scholarship may have outgrown the teachings of Hindu commentators in the interpretation of the Veda, the material assistance which their honest efforts have hitherto rendered towards a correct understanding of the poetical effusions of their forefathers will and can never be forgotten; and it is by this edition of Sāyaṇa, more than by any other work, that the name of Professor Max Müller will ever rank foremost among Vaidik philologists.

The value of the present volume is enhanced by the first

part of a complete *index verborum* of the Rig-Veda, which will no doubt prove extremely useful to all those who are engaged in the interpretation of these hymns. The unconditional adoption of the *pada*-, or detached, form for this purpose has certainly its inconveniences; but most of these will probably be removed by the scientific glossaries promised by other scholars. Besides, another valuable supplement, viz. an *index* of the *uttarapadas*, or last members of compound words, which, it is expected, will follow in the concluding volume, will supply at least some of the wants alluded to.

The literature of the *Yajurveda* has found its chief and most zealous cultivator in Professor Albrecht Weber. The *Vājasaneyi-Sanhitā*, the textbook of the White, or younger, branch of the Yajus, was published by that scholar, together with *Mahidhara's* commentary, in 1852. This edition was followed, in 1855, by the *Satapatha-Brahmana*, and, in 1859, by the *Śrauta-Sūtra* of Kātyāyana; both accompanied with extracts from commentaries. These works, as the one noticed above, were published under the auspices of the Court of Directors of the East India Company. As to the editor of Sāyana we are indebted for an edition and translation of the *Rikprātishākhya*, so Professor Weber has supplied us, in the fourth volume of his *Indische Studien* (1858) with the text and translation of the *Prātishākhya* of the Vājasaneyins. The same scholar has now completed an edition, in the Roman character, of the *Sanhitā* of the Black, or ancient, branch of the Yajus, occupying two consecutive volumes, the eleventh and twelfth, of his valuable series. Naturally much less interest attaches to the text books of the Yajus, being composed of sacrificial formulas and of verses taken for the most part from the *Rig-Veda-Sanhitā*, than may justly be claimed by the latter collection. Still, Professor Weber has done a good service to Sanskrit scholars in publishing the *Sanhitā* of the only Veda of which a complete edition did not hitherto exist. The *Taittiriya-Veda* has been studied extensively in Southern India, where, as Mr. Burnell informs us, the younger branch of the Yajus is all but unknown. An edition of this *Sanhitā*, together with Sāyana's comment, was commenced as far back as 1854 by the late Dr. E. Röer, in the *Bibliotheca Indica*. Though this is actively carried on at present by the Calcutta pandits, only about one-half of the work has been published, and it will probably take many years longer before it is completed. For this reason Professor Weber, in his edition, has added some extracts from the commentary on particularly interesting passages of the later portion of the text. He has also been able, for the first time in the publication of a *Sanhitā*, to refer throughout to its corresponding *Prātishākhyaśūtra*, viz. to the *Taittiriya-prātishākhya*, published by Professor Whitney, of Newhaven. The present edition contains besides a *résumé* of the ritualistic employment of the several sections, according to the *Kāṇḍānukrama*, the text of which is also given; and an alphabetical index of the beginnings of the *rich*, or verses, and the sections, or *anuvākas*, not of the *Sanhitā* only, but also of the *Taittiriya-Brahmana* and *Āraṇyaka*; additions which will greatly facilitate reference to these texts.

J. EGGLING.

THE LATE MR. EDWIN NORRIS.

THE death of Mr. EDWIN NORRIS, on the 10th of last month, leaves a gap in the small band of English Orientalists, which, we fear, it will not be easy to supply. He was born October 24, 1795, and in his youth spent several years abroad in the capacity of a private tutor. His first appointment was a clerkship in the India House; he afterwards became one of the interpreters to the Foreign Office, and his services in this capacity were acknowledged by a small pension, which enabled him to devote the last ten years of his life entirely to his

favourite studies. The post however with which his name more readily associates itself is the secretaryship of the Asiatic Society, which he occupied for more than twenty-five years, and which was the real turning-point of his career. The duties attaching to his office, especially the editorship of the society's journal, and the constant opportunities afforded him for associating and corresponding with the best Oriental scholars and antiquarians of the day, English and foreign, coupled with a natural taste for philological research, went far to efface the traces of a want of early philological training, and to impart to his mind that breadth of information which soon became so well appreciated by the many students who consulted him. But the time soon came when the critical sagacity and patient industry of Mr. Norris were put to a more serious test. In 1845, impressions, very faint and indistinct, on pieces of cotton cloth, taken by Mr. Masson from the rock inscription of king Aṣoka, near Kapur di Giri, were placed at the disposal of the society, and Mr. Norris at once undertook the difficult task of deciphering this curious document, and producing a correct representation of it on a reduced scale for publication in the society's journal. The masterly and thoroughly satisfactory manner in which he accomplished this task fully deserved the terms of admiration freely bestowed upon it by scholars like Professor Wilson, then director of the Asiatic Society. The following year, however, was destined to turn Mr. Norris' energies into a new channel of research, too attractive to be ever again abandoned. The immediate occasion was Major, now Sir Henry, Rawlinson's copy and analysis of the great cuneiform record of Darius Hystaspes at Behistun in Persia. It fell to Mr. Norris' lot to carry this important memoir through the press; and so thoroughly did he penetrate, by unwearied exertion, the mysteries of the newly disclosed dialect that not only did he render essential service to the early publications of Sir Henry Rawlinson (whose official employment at Baghdad prevented their being revised by himself, thus saving them from being ushered into the world in a comparatively imperfect state), but Oriental scholars soon learned to look upon him as one of the chief authorities in cuneiform philology. Besides several papers on these subjects contributed by Mr. Norris to the *Journal of the Asiatic Society*, the most important of which is his "Memoir on the Scythic Version of the Behistun Inscription" (vol. xv. 1855), he assisted Sir Henry Rawlinson in publishing for the British Museum two volumes of cuneiform inscriptions, thereby furnishing ample materials for more extended cuneiform researches (1861-66). The chief result, however, of these studies, and the work which, though incomplete and however modestly put forth, marks an epoch in cuneiform studies, is Mr. Norris' *Assyrian Dictionary*. Three volumes of this work were published in 1868, 1870, and 1872 respectively, comprising the letters Aleph to Nun. Much of the contents of these volumes may no doubt become antiquated, and many of the tentative meanings assigned to words may be rejected hereafter; still they will always be acknowledged to contain a great amount of useful and trustworthy information, showing on every page the vast extent of Mr. Norris' reading; while those who use his work cannot but admire the singular candour and modesty with which he places before his fellow students the results of his enquiries. The works hitherto mentioned, whilst they are the principal, are by no means the sole, fruits of Mr. Norris' philological labours. For some time he paid considerable attention to the Celtic dialects, and in 1859 published in two volumes the text and translation of three Cornish dramas, constituting by far the greater portion of the existing relics of Cornish literature. Of other publications may be mentioned, *A Specimen of the Vai Language of West Africa* (1851); *A Grammar of the Bornu or Kanuri Language* (1853); and *Dialogues and a Small Portion of the New Testament in the English, Arabic, Hausa, and Bornu Languages* (1853). A disposition naturally modest and retiring impeded the recognition of Mr. Norris' merits in the great world (his only honours were a foreign membership of the German Oriental Society, and a Bonn honorary degree of Doctor of Philosophy); but none who had the happiness of his acquaintance, or who have carefully studied any of his works, will withhold their tribute to such a rare union of excellences.

Intelligence.

The cuneiform inscription referred to in *Academy* of December 1 (vol. iii. p. 460), as containing, in Mr. G. Smith's opinion, the Babylonian version of the story of the Deluge, turns out to be an Assyrian translation of an Accadian or proto-Chaldaean text deposited at Warka (Erech). There can therefore be no doubt of the extreme antiquity of the narrative. The Assyrian text is evidently encumbered with numerous glosses, and the reading of the proper names is doubtful. Sir H. Rawlinson (*Athenaeum*, December 8) conjectures that the twelve tablets, of which that describing the Deluge was one, embodied a series of myths connected with the signs of the zodiac. The eleventh Babylonian month was dedicated to the god of rain and tempests, and answers in the zodiac to Aquarius. Hence the myth on the eleventh tablet embodies the story of the Deluge. It is much to be desired that Mr. G. Smith's discovery may be verified as soon as possible by other Assyriologists.

M. Lenormant read a paper lately before the Académie des Inscriptions on the sources of our knowledge of the Accadian language, of which he proposes to write the grammar.

A German translation of Luzzatto's grammar of the Biblical Chaldean and the idiom of the Babylonian Talmud has been brought out by Dr. Krüger. The few notes added by the translator are of no great importance, and might have been improved by reference to modern Syriac. Thus נָחַם לְפָנָיו (p. 71) may be illustrated from Nöldeke, *Gr. der Neusyrischen Sprache*, p. 77. That the pronoun נָחַם is probably compounded of נָחַם and יָד, which Dr. Krüger styles an incidental remark ("eine beiläufig gemachte Bemerkung") of Luzzatto's, is considered by Nöldeke (*op. cit.* p. 83) to be the only possible derivation.

Dr. Chwolson's recent tract, *Die Semitischen Völker*, has called forth some interesting critical remarks from Dr. Nöldeke in *Im Neuen Reich* for December. Dr. Chwolson, who so worthily sustains the character of Jewish scholarship in distant Russia, seems to have been carried too far in an opposite direction to Renan. Nations are not inert, immovable masses, but organisms susceptible of development and assimilation. Hence the characteristics of European Jews must not be set down to the credit of the race. The typical Semitic religion is not that of the Old Testament, especially when the latter is idealised, as it is by Chwolson, but Islam. The Indo-European races are not less productive in the field of religion than the Semitic, but inferior in moral energy. Chwolson denies the Semites an ascetic tendency, but he forgets the Nazirite vow, Essenianism, and the frantic asceticism of the Syriac Semites from the fourth to the seventh century. In politics, the Semites are—certainly not democrats, as Chwolson represents—but keen aristocrats; in warfare, incapable of sustained combination, except under extraordinary impulses; in science and art, too exclusively attentive to details.

Prof. Wright, of Cambridge, has edited the text of the three recently discovered leaves of the Curetonian Gospels from Prof. Roediger's edition, and from a copy of the manuscript made by himself. One hundred copies have been printed for private circulation.

The first fasciculus (Genesis) of Dr. Petermann's Samaritan Pentateuch has appeared. The only information as to the critical apparatus is contained on the title-page, from which we learn that the text and variant readings are drawn from MSS. collated by the editor at Nablous. The many interesting questions that suggest themselves—as to the date and comparative value of the MSS., and indeed as to those of the Samaritan text itself—will no doubt be answered in the preface. Dr. Petermann also notices where the editions read otherwise than his MSS. It is to be regretted that he did not act in concert with Dr. Heidenheim, who, as he informs us, has collated the printed Targum with the Roman MSS.

Contents of the Journals.

Journal of Philology, No. 8.—Professor Grote (the late): On Glossology. [Continued from previous number.]—B. H. Kennedy: *Vindiciæ Sophocleæ*. [A series of somewhat petulant criticisms on Campbell's *Sophocles*.]—F. D. Morice: Two passages in Aeschylus and a note of Lobeck. [On *ποσειδών* and *στυγνός* in *Ag.* 294 and *Prom.* 592.]—I. Bywater: Critical Notes on Clement of Alexandria.—The Same: On a passage in Aristotle's *Ethics*.—A. A. Vansittart: Fragments of an old Latin Apocalypse. [Gives the legible portion of the version of the Apocalypse in the Paris MS. noticed in No. 4 of the *Journal*.]—C. J. Munro: Latin Metres in English, after Sidney, Tennyson, and Mr. Ellis. [Chiefly strictures on Ellis' translation of Catullus.]—H. A. J. Munro: Catullus' Fourth Poem. [An elaborate commentary on the scene of the poem: a note appended proposes to transpose lines 7 and 8 in the Second Poem and read, "credo ut, cum gravis acquiescet ardor, sit solacium sui doloris."—The Same: Lucretiana. [Points out cases of hiatus in the traditional text of Lucretius, and gives a new explanation of iv. 42–53; concludes with remarks on transposition as a means of emending the text of Lucretius.]—R. Ellis: On the Fragments of Sophocles and Euripides. [Emends a number of these, and adds some fragments not hitherto included in collections.]—H. Nettleship: On the etymology of *consul*, *exsul*, *insula*, and *praesul*. [Connects the three first with the root found in the Gothic *sal-jan* and the German *Saal*.]—W. Selwyn: Emendations of certain passages of *Eusebii Eclogæ Propheticae*.—F. A. Paley: Verse Epitaphs on Roman monuments. [Observations critical and explanatory on seven epitaphs in Brambach's *Corp. Inscript. Rhenan.*]—H. Sidgwick: The Sophists. [An extremely able vindication of Grote's view, in answer to recent objections.]—H. Richards: Note on Herod. v. 28. [Acutely suggests *ἀνὰ τοὺς αἰῶνας* for *ἀνέως*.]—H. Jackson: On some passages of the *Nicomachean Ethics*. [Chiefly on v. 5: a new and most satisfactory interpretation of this difficult place.]—E. B. Cowell and J. E. B. Mayor: Fragments of Greek Comedy. [The former points out two fragments in Origen, *C. Cels.*; the latter one in the *Paroemiographi*, *Apostol.* vii. 20, where *μεταξύ τινος* is to be restored.]

Rheinisches Museum, vol. xxvii. part 4.—L. Breitenbach: Xenophon's *Hellenica*, book i., compared with Diodorus and Plutarch. [Maintains the integrity and historical importance of the book in its existing form.]—J. Gildemeister and E. Bücheler: The pseudo-Plutarch *περί ἀσκήσεως*. [A German translation, with commentary, of the Syriac text in Lagarde's *Analecta*.]—H. Nissen: The History of Livy. [Suggests an entirely new mode of dividing the work, in place of the common one into decades.]—A. Rapp: The Maenads in the Greek cultus, in Art and Poetry.—C. Wachsmuth: Locrian Inscriptions.—W. Schmitz: On the Tironian Notes.—L. Jeep: On the MSS. of Claudian's *Raptus Proserpinæ*.—A. Riese: On the *Historia Apollonii regis Tyri*. [A reply to Teuffel's theory as to the relative value of the MSS.]—B. Schmidt: The *Drymiae*.—J. Steup: On Thucyd. iii. 17. [A defence of his view that the chapter is an interpolation.]

The China Review, ed. by N. B. Dennys. Vol. i. No. 1, Hongkong, July and August, 1872.—Introduction.—The She-king. [Review (excellent and highly favourable) of Dr. J. Legge's edition and translation of that work in his *Chinese Classics*, vol. iv. pt. i., by E. J. Eitel.]—The Adventures of a Chinese Giant. [Account of the adventures of Lo Tat, translated from a Chinese work of fiction entitled *Shuwei Hu Chuen*, by H. S.]—A Chinese Farce. [Translation, by A. Lister, of the groundwork of a farce performed at the Tung Hing Theatre, on Nov. 12, 1869, before the Duke of Edinburgh.]—Su Tung-Po. [Account of that statesman and man of letters, who was banished to Canton about A.D. 1066; being a chapter from an unpublished history of the Kwangtung Province, by E. C. Bowra.]—Mr. Wade on China. [Translation, by H. E. Wodehouse, of an official memorial on the position of affairs in China, addressed to the Chinese Ministers of State, by Mr. Wade, at the request of Sir Rutherford Alcock.]—From Gotham to Cathay. [Account of a journey from New York (Gotham) across the "Great West" to China.]—Rhymes from the Chinese. [Poem "To a Successful Friend," translated from To Pò, by J. Chalmers.]—The name "Hongkong." [The name is explained as meaning "pleasant port," instead of "fragrant streams."]—China's Place in Philology. [Review, rather unfavourable and severe, of J. Edkins' work, by T. Watters.] Short notices of new publications and literary intelligence.—Notes and queries.

New Publications.

BEZZENBERGER, A. Untersuchungen über die gotischen Adverbien u. Partikeln. Halle: Buchhandlung des Waisenhauses.
GRASSMANN, H. Wörterbuch zum Rig-Veda. 1. Lieferung. Leipzig: Brockhaus.
HERMÆ PASTOR. Veterem latinam interpretationem e cold. ed. A. Hilgenfeld.
HYGINI FABULÆ. Ed. M. Schmidt. Jena: Mauke.
ISAAC, Saint, of Antioch. Opera omnia cum varia lectione syriacæ arabiceque primus ed., latine verit, prolegomenis et glossario auxit G. Bickell. Pars I. Giessen: Ricker.
LANGE, L. Der homerische Gebrauch der Partikel *εἰ*. 1. Einleitung: Ueber *εἰ* mit dem Optativ. Leipzig: Hirzel.
STAHL, J. M. Quaestiones Grammaticae ad Thucydidem pertinentes. Bonn: Weber.

ERRATUM IN No. 62.

Page 477, col. 2, line 13, for "language" read "layman."

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Vol. IV.—No. 63.

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"INTER SILVAS ACADEMI QUÆRERE VERUM."

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REGISTERED FOR

WEDNESDAY, JANUARY 15, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Les Humbles. By François Coppée. Paris : Alphonse Lemerre, 1872.

Two years ago, in the pages of the *Academy*, it was sought to estimate the work of the most acceptable of recent French poets, from the time when the work was tentative and the poet a youth to the time when the work was surer and the poet an accomplished man. M. Coppée's course since 1870 has been unequal, and at certain moments disappointing; but its last step is a step in advance—the publication of *Les Humbles*. The war and the revolution were misfortunes for his work, his genius and acquirements not being of the kind to be exalted by either. Victor Hugo, with no loss of prestige or power, could bewail "the terrible year" in passionate verse; but Coppée, who is most of all literary and least of all political, struck only a feeble and unworthy note in his few lyrics of the war and the peace. In common with many another imaginative writer, for whom the times have proved too heavy, he produced duly measured lines which as to the matter, not the manner of them, are fuller of patriotism than of poetry. So at least one must speak of the "Lettre d'un Mobile breton," and of the "Plus de Sang"; yes, even of the "Bijoux de la Délivrance," and of "Fais ce que dois," though these have at all events, in addition to the habitual faultlessness of versification, the accent of passion and a very seething sense of unforgotten wrongs.

Of "L'Abandonnée"—a two-act drama in verse—something more, or something different, deserves to be said. It did not show to those who watch the progress of this poet—a leader, we may call him, of the third or new generation of romanticists—that he had acquired the constructive skill usually so necessary at the theatre, for it presented scarcely more than two situations—the beginning and the end of a career—with between them a lapse of time and events which no common treatment by a common dramatist could justify. And yet, however ineffective may have been this play upon the stage, one is not inclined to quarrel seriously with M. Coppée on account of it, because the very abruptness of transition from beginning to end renders more vivid the contrast of the *tableaux*: first, the little sewing-girl is exposed to a temptation; then, suddenly, it is an outcast who dies at the hospital—the student and

seducer of past years now standing as physician by that premature death-bed.

From the new volume, styled *Les Humbles*, memories of the war are not wholly absent; and in so far as they are present, they weaken the book. For the little war-poems have neither the substance nor the style which one demands in work that is to last; and their admission into a volume otherwise so worthy to live is probably due to the fact that artistic and sympathetic men who live through a great national crisis feel the interest of that crisis so stupendous that they become for the time incapable of knowing the artistic value of work which has that crisis for subject. For the moment, almost any treatment seems sufficient—the treatment being so little, the subject so much—and it is only when the passion of the time has cooled that there become apparent the deficiencies which passion and sympathy have covered. And from this may be deduced a one-sided truth, to add to the many which are the fruit of criticism—the truth that an artist may do well to eschew in his work those contemporary themes which stir him to a point at which excitement becomes *exaltation*. His work is better when thrown back upon art alone for its effect. This, at all events, is a half-truth which we may preach to M. Coppée.

And the finest and most abiding things in *Les Humbles* are undoubtedly the poems in which M. Coppée has treated themes without his personal experience; relying, if you will, upon keen observation, but also upon dramatic power, for the insight into lives different from his own, and upon unspared labour for the art which makes the student's observation and the poet's insight useful or pleasurable to men. "La Nourrice" is probably the strongest and the saddest of these studies of humble and secluded life which M. Coppée has executed, and one must go back to that which is quite the best in Victor Hugo—quite the most vivid in Casimir Delavigne—to find the equal of his picture of the wet-nurse in the mad-house at Caen: a woman with aimless hand on a livid breast, and foot mechanically rocking an empty cradle, for all consolation. Art like this has something in common with the pictorial art of Regnault. To borrow a happy word of Mr. Colvin's, it is an art, not of rapture, but of "remonstrance."

A study calmer and not less complete is that of "Le Petit Épicier." What there is of poetical—nay, what there is of tender, humane, and regretful—in the character and intimate

thought of a small tradesman of Paris, is here brought out with very noteworthy skill, and still more noteworthy sensitiveness and breadth of appreciation. And the whole family group—the peevish and disappointing wife, the embittered, silent husband, and the mother who goes back to Soissons lest bad times should become worse—all these are presented with a delicate fidelity and individuality which Meissonier would hardly surpass, and with a peculiar quietness and reserve of pathos which more often accompanies somewhat different gifts. The picture of the unfrequented shop in the third-rate quarter of Paris, with the brooding “little grocer” chopping his sugar with melancholy, may well remain with one when the memory of more ambitious work shall have passed away. In the poems entitled “En Province” and “Un Fils” the work is equal in carefulness and completeness to that in “La Nourrice” and “Le Petit Épicier”; though in one of these—“En Province”—the work is bestowed upon a subject which lacks the striking dramatic situation of the “Nourrice” and the peculiar and unwonted appeal of the “Little Grocer.” In “Un Fils” there are many touches indicative of shrewd yet indulgent contemplation of the world and its ways. It is not, for example, quite without originality that M. Coppée represents the poor and sometime blameless mother as eventually soured and spoiled—not blessed and edified—by a life of monotonous trial. And again, in the *conciérge* of the house where mother and son occupy a couple of attics, we have a sketch of complacent prosperity which, if sufficiently enlarged and elaborated, might be of some service in comedy.

Turning to the “Promenades et Intérieurs,” which close the volume, it becomes clear that it is no longer much of matter, but chiefly of manner, that we can speak. Little poems of ten lines each, they record an impression while it is fresh; a feeling hardly strong enough to be called an emotion; the aspect of a chamber at a given moment; the glimpse of the poet playing the flute at an open window in summer. They may be thought of along with some among the smaller etchings of Ostade, alike for triviality—or, dare I say, simplicity?—of subject and delicacy of treatment. This at least is true of the best of them: perhaps not of the many which seem indeed to need the apology of that playful fiction by which, in the last of the set, the reader is represented as looking over the shoulder of the writer, to read that which is meant for the writer alone. But it is true—and perhaps even stronger praise might be true—of some half-dozen; including certainly the lines in which M. Coppée has hinted at that errant *Sehnsucht* of the poetical un-Philistine nature which I think Mr. Matthew Arnold has painted in his “Scholar-Gipsy,” and Mr. Browning (of course, how differently!) in his study of “Waring.”

FREDERICK WEDMORE.

Taine's History of English Literature. II. van Laun.
Edmonston and Douglas.

M. TAINÉ has read most of our classics, and he has also been graciously pleased to decide that the artistic evolution of a nation is a reflection of its social evolution. This theory has two merits; any one who was engaged in serious researches in the history of a literature might find it an useful working hypothesis, and any one who wished to group the obvious facts about a foreign literature in an emphatic and plausible way would be the better for such a thread to stretch his collections on, and would not be reduced to the necessity of trusting to the daily decreasing remoteness of his subject for the freshness of his book. Even without such assistance, M. Taine's vivacity would have secured freshness enough, and when we have compared the size of

the book with the extent of the subject, a few diffuse and copious pages are enough to show that the author has taken too much space for exposition to have room left for original enquiry. In fact, the theoretical part of the book comes to little more than a statement that the English have what the translator calls “a deeper sap” than the French, which is illustrated *ad libitum* by bringing the familiar contrasts between French and English history to bear on the familiar contrasts between French and English literature. This is done with an union of force and clearness and profusion which almost recalls Macaulay; only Macaulay was fortunate in always having a definite story to tell, or at least a definite thesis to prove. To have gone through English literature with unfailing vigour with no very glaring omissions and with what may be called substantial accuracy is a very considerable feat: but here our praise must end. M. Taine appears to be of opinion that his method is an advance upon Sainte-Beuve's; it is a pity that he did not allow himself to be guided as often as Sainte-Beuve by the presumption that whatever has been respected is probably respectable. Literary scepticism may easily be excessive; to be quite frank, there are passages (especially in the chapter on Pope) which recall the irreverence and injustice of the Romanticists without their fervour; there are others which recall the narrowness of the older school of French criticism without its systematic sanity. In details the conventional account is too often repeated without examination: it is a more serious fault that the whole treatment of what we call the Elizabethan period is capricious to the last degree; all the minor dramatists, from Kyd and Marlowe to Webster and Massinger, are discussed pell-mell; then we have a chapter on Jonson; then a chapter on Shakespeare. Considering how the authors of that period studied and criticised each other, it is simply astonishing that a writer with pretensions to a scientific method should have sacrificed the natural development of his subject which coincided with the simple chronological order to a frigid rhetorical climax. After this it is not surprising to find the anthropomorphism of Milton caricatured (often with a certain felicity) on the hypothesis that his imagination was occupied with the vision of a heavenly Whitehall, while such a magnificent *tour de force* as the *Samson Agonistes* his most faultless, though far from his greatest, work, is ignored altogether. Dryden is better treated; he was not above the level of the highest admiration of an industrious *littérateur*. It may be matter of opinion whether the Romantic movement has produced better fruit in France or England; whether it is a compliment to Wordsworth that M. Taine finds parts of the *Excursion* almost like a discourse of Théodore Jouffroy's; and whether Alfred de Musset is really a more profound or original poet than Tennyson. It is certain that M. Taine seriously misconceives the aesthetic value of the archaic element in Scott's novels, that he utterly misses the ethical charm of his poetry, and, for that matter, of poor Southey's too. He imagines that the value of both is simply that they have a good collection of picturesque properties, whereas Southey's merit lies in his moral elevation and in the dignified and ingenious though slightly mechanical construction of his stories, while Scott's lies in the temperate sentimentalism of a robust and healthy nature.

The fifth and last book is simply a collection of separate studies on Macaulay, Dickens, Thackeray, Mill, Carlyle, and Tennyson. The essay on Mill has been approved by its subject; those on Thackeray and Dickens are ingenious and amusing, though the writer makes the mistake of attributing all the traces that they share the moral beliefs of Englishmen to a direct purpose of moral edification, to which Thackeray at least was a stranger.

A propos of Thackeray, it is a pity that Mr. van Laun has not noticed that in the popular edition of *Vanity Fair* a passage which he assures us was omitted after the first edition has been happily replaced. The author is satisfied with the fidelity of the translation, and in spite of one or two curious locutions it is readable enough; and it is certainly a public service to have placed a work so vigorous and stimulating as Taine's *History of English Literature* in the reach of that large and unhappily increasing class who read not from desire of knowledge, but to avoid the inconveniences of ignorance.

G. A. SIMCOX.

An Introduction to the Study of Dante. By John Addington Symonds, M.A., late Fellow of Magdalen College, Oxford. Smith, Elder, and Co., 1872.

MR. SYMONDS' agreeable volume differs from other books that have lately been published on the same subject in being rather a critical review of Dante's great poem than an explanatory analysis of its contents, like Miss Rossetti's *Shadow of Dante* (see *Academy*, vol. ii. pp. 551, 552), or this together with the discussion of numerous theories relating to it, like Dr. Pfeiderer's *Göttliche Komödie* (see *Academy*, vol. iii. pp. 163, 164). It is true that incidentally we are introduced to a great part of the poem, and are thus enabled to form a tolerably accurate idea of its various parts, but the course of Dante's narrative is not systematically followed. Nor does Mr. Symonds, though he has evidently studied the text of the *Commedia* with minute care, pretend to an extensive knowledge of the questions which have been raised in connection with it, for in his preface he expressly disclaims any but a limited acquaintance with Dante literature, nor do we meet with any reference throughout the book to the great German critics, who have contributed more than anyone else to the right understanding of the poem. Anyone, therefore, who expects to find these elements in this volume will be disappointed, and for this reason a better title might perhaps have been found for the work than *An Introduction to the Study of Dante*; but still *non omnia possumus omnes*, and our author's style is so delightful, his criticisms for the most part so excellent, the points he discusses so numerous and so varied, and the interest with which he invests the subject so sustained, that we should be hard to please if we required more. It is, therefore, as a critical and artistic study of the poem that we propose to regard it, premising first a general account of its contents.

Mr. Symonds commences with an interesting sketch of the general tendencies of Italian history before Dante's time, and of the causes which produced the political entanglements in the midst of which he lived. Here, as elsewhere throughout his book, he endeavours to elucidate his subject by means of comparisons; and so, contrasting mediaeval Italy with ancient Greece, he describes the influences which prevented the Italian States from working out their history as those of Greece had done—the jealousy and greed of foreign powers, and the existence of an anomalous spiritual power in the midst of them. "It was," he says, "as if the States of Greece before the age of Pericles had been subject to the continual interference of a flourishing Persia, a greedy Macedonia, a heartless Carthage, and, moreover, had established in the midst of them, say at Delphi, a selfish theocracy, regardless of their interest, but rendered potent by superstition and by unbounded wealth." In the same way, at the end of the volume there is an excellent analysis of the spirit of chivalry, in connection with the influence of the Provençal poetry on Dante and his contemporaries in Italy. The second and third chapters are taken up with a life of the poet, together with notices of his minor works, after

which our author proceeds to what is evidently to him the interesting part of his work, the study of the *Divine Comedy*. Under the head of the "subject and scheme" of the poem, he discusses such questions as its relation to other epic poems, the originality of its conception, and the nature of its allegory; then passing on to its "human interest," he speaks of various features of Dante's character as revealed in the *Vision*, his mode of viewing human nature and the men of his time, and the human aspect of the principal episodes of the poem; and in order to discuss the different characters introduced more fully, he conducts us through the various spheres of the spiritual world, and passes in review the main personages that are found in each. Finally, he investigates "the qualities of Dante's genius," the intensity and definiteness of his power of vision, his compression of thought, and the trenchant brevity of his expressions; in illustration of which points he notices his pictorial descriptions and his similes; and compares the sublimity of Dante with that of other great poets, and his art with the other forms of art in mediaeval Italy, concluding with an estimate of his place in the literature of modern Europe. All these points, and many subsidiary ones, are treated succinctly and lucidly, and illustrated by well-chosen passages, so that a definite impression is left on the mind, and the reader's interest is never allowed to flag.

In designating the *Divine Comedy* as an apocalypse rather than an allegory, and comparing it with the Revelation of St. John, inasmuch as in both of them the great truths that they embody are represented in the form of pictures and narrations, Mr. Symonds appears to us to have drawn a very accurate distinction. At the same time he does not deny that a distinctly allegorical element appears here and there in the course of the poem, and in particular at its commencement; though in interpreting that part he has laid too much stress on the political side of the allegory, to the exclusion of its moral and personal bearings. He is happy also in his comparison of Dante and Milton, where he characterizes the former as Italian and mediaeval, the latter as Northern and a child of the Renaissance. His style is so charged with metaphors and metaphorical expressions, and his desire of placing every statement before the reader in the most forcible light is so strong, that we might almost fancy he had been infected by the spirit of his favourite author. We cannot do better than give a few instances of his effective use of this kind of diction. "Dante incarnates the spirit of Mediaeval Christianity, so that we may study it in his poem as we interrogate the features of a face to learn the secrets of the soul beneath." The meeting of Virgil and Beatrice is "the mild and melancholy radiance of the faithful guide of the *Inferno* paling before the rising splendour of the queen of Paradise, as the moon fades into the dawn and vanishes in silence." The harmonious structure of the poem is called "the line of beauty, plastic in the poet's hand, which curves and is complete in the three *Cantiche*." The following description of three different kinds of epic rhythm deserves to be quoted at length:—

"In reading the hexameters of Homer we seem to be sailing buoyantly over the crests of Atlantic waves: Milton's blank verse is like a fugue voluminously full upon an organ of many stops: Dante's *rime*, terse, definite, restrained within precise limits, has no Homeric ocean-roll, no surges and subsidences of Miltonic cadence, but, instead, a forceful onward march as of serried troops in burnished coats of glittering steel. His lines support each other, gathering weight by discipline, and by the strict precision of their movement. Or, to use another metaphor, they are closely welded and interlinked like chain-armour, so that the texture of the whole is durable and supple, combining the utmost elasticity with adamant hardness."

In like manner, there is much vigour in such expressions as "the powerful will with which he forced thought into

language"; "he wrings sublimity from his subject in spite of its detail and minuteness"; and the love of the *Vita nuova* is happily described as "such love as the 'young-eyed cherubim' might feel." A style which abounds in these forms of speech requires to be carefully guarded, and it is surprising that our author should have succeeded in sustaining it so well throughout his volume; but if he takes a wider flight in literature, he will be wise to prune it considerably. In a few instances the desire to be effective has even betrayed him into faults of taste. It was hardly well to tell his readers that "the Bolge are full of action, vanity, and interest. We do not wonder what the demons find to do to drive away their sulphurous ennui."

And yet, notwithstanding Mr. Symonds' careful study of Dante, we cannot help doubting whether he fully appreciates him after all. His point of view is so much of the nineteenth century that he seems to admire rather than to sympathize. For this reason he is hard on the mediævalism of the poem, and finds many parts dull, which, in spite of their abstruseness, possess a peculiar interest of their own. He finds, without reason as we think, great frigidity arising from the twofold character in which Virgil and Beatrice appear, of human persons and allegorical abstractions. He complains that we are prevented from feeling interest in them. But they are not intended to excite our interest; half the weird mysteriousness of the poem would be lost if we felt that our guides were beings like ourselves, and were not half shrouded by their double personality. Nor can we allow that the *Commedia* is deficient in scenic sublimity, or that this is seriously interfered with by the smallness of scale of much that is described, or by the definiteness of the delineation; the darkness, and confused sounds, and half revealed forms, that compose the background of all the scenes in the *Inferno*, more than counterbalance any sense of limitation which might arise from these causes, and the whole atmosphere of the *Paradise* is that of indefinite magnitude. But though in some of these points we may think that Mr. Symonds has not fully entered into the spirit of his author, we can unhesitatingly recommend his book to students of Dante, for the interesting and tasteful criticism which it contains.

H. F. TOZER.

Traditions, Superstitions, and Folklore (chiefly Lancashire and the North of England): their Affinity to others in Widely Distributed Localities, their Eastern Origin and Mythical Significance. By Charles Hardwick. Manchester: A. Ireland and Co.; London: Simpkin, Marshall, and Co., 1872.

THE author of this book says, at the end of his preface: "I would gladly persuade myself that I have, at least, rendered what many regard as frivolous, and others as very abstruse and very 'dry reading,' interesting, attractive, and instructive to the general reader;" and to a certain extent he may have succeeded in his purpose. But he should have set to work more carefully in order to avoid leading the "general reader" astray by false or inaccurate statements such as a few that I will instance. On p. 36, we read: "Mr. Angus (read Angas) says, some of the western tribes of Australia 'have no means of kindling fire,' . . . the Tasmanians are in the same predicament. . . . According to Father Gabian (read Le Gobien), fire was utterly unknown to the natives of the Ladrone Islands." The erroneous character of these pieces of information appears from Tylor's *Early History of Man-kind*, p. 234, seq., 238., 2nd ed. On p. 61, Mr. Hardwick quotes "a work entitled 'Naogeorgus,' but generally styled the 'Popish Kingdom,' published in 1570, and translated by Barnabe Googe." Naogeorgus (Grecised from Kirchmayer) is the name of the author of the well known work,

Regnum Papisticum, not the title of the work itself. What is repeated from Kelly, on p. 68, about "Kushtha, the embodiment of the Soma," &c., is corrected by Max Müller, *Chips*, ii. 206, seq.—The story quoted on p. 129 from Crofton Croker, of the *boggart* who accompanied the farmer Cheet-ham on his flitting, is not a *nouvellette*, but a genuine *tradition* existing amongst many peoples. *Vide* Grimm, *Mythol.* p. 480; *Gervasius von Tilbury*, ed. Liebrecht, p. 167; and my notice of Harland and Wilkinson's *Lancashire Folklore*, in the *Heidelberger Jahrbücher*, 1868, p. 93. "The dawn of Ragnavöck (read Ragnorök or Ragnarökr), 'the great day of arousing,' according to Scandinavian mythology" (p. 135). Where did Mr. Hardwick find such an explanation?—"Frederic Barbarossa, he of the red beard like Odin" (p. 164)—for *Odin* read *Thor*.—"Kelly says he can find accounts of the nightmare assuming the forms of a mouse, a weasel, a toad, and even a cat, but never of a horse or a mare, except in the picture referred to" (p. 184). But see Grimm, *Myth.* p. 433, 1194; Ralston, *Songs of the Russian People*, p. 133, 2nd ed.; Ellis, in Brand, iii. 155, "The Nightmare and Her Nine Foals." The painter Fuseli is not, therefore, guilty of perpetrating a "great and absurd blunder."—"The Rev. G. W. Cox, in his *Mythology of the Aryan Nations*, referring to the origin of Greek 'Lykanthropy,' says:—'The question to be answered is, Whence came the notions that men were changed into wolves, bears, and birds, and not into lions?'" &c. (p. 240). But Dr. Livingstone reported, in his first travels, that the inhabitants of the neighbourhood of Kebrabasa, on the Zambesi (near the Portuguese settlements), believed their chieftain to have the power of transforming himself into a lion when he wished to kill anyone, and then resuming his human shape. On p. 253 there is a quotation from a MS. of the seventeenth century: "Take a knife or an awl which has been stroked with a magnet, and previously stuck through a great Frögröda (?), slit the bark," &c. Instead of *frögröda* it should be *frö (groda)*; both words mean *frog* in Swedish, and the commoner expression *groda* is a parenthetical explanation of the rare form *frö*, which also means *seed*. It follows, therefore, that the charm in question was derived from Sweden. In addition to these corrections, I will only observe that in Mr. Hardwick's book there is much (e.g. chaps. i. ii.) that is confused, superfluous, and unprofitable to the "general reader," who will scarcely know how to find the passages referred to as in Kemble, Wolf, Schwartz, &c., without any more precise indication (for though they are nearly all to be found in Kelly, they have to be looked for there); and that Mr. Hardwick would have done well to leave etymology alone altogether, as he is a perfect tyro in the science. All these defects must be corrected before his book can prove "instructive" even to the "general reader."

FELIX LIEBRECHT.

LITERARY NOTES.

Mr. W. G. Palgrave's "Anatolian Spectre Stories," in the *Cornhill Magazine* for January, have a weird reality which would guarantee their authenticity even if the writer's name did not do so. In the last, popular superstition seems beginning to undergo the transformation which results in substituting ghosts for evil spirits.

Fraser is more readable than usual this month, though it cannot be said that Mr. Froude's "Address in Answer to Father Burke" does much to weaken the force of Mr. Lecky's strictures (*Macmillan* for January) on his new zeal for the divine right of the strongest and his political intolerance of Catholicism.—There is an ingenious paper on Shaftesbury by "L. S." treating him as the Matthew Arnold of Queen Anne's reign; a companion study of Mandeville is promised.—Mr. Galton's idea of "Hereditary Improvement" has the misfortune of being very old, for the natural

aristocracy which he proposes to found by the help of tables of averages, when founded, would be exposed to all the same temptations and dangers as aristocracies of birth or wealth in the past and present. Experience shows that in a close caste the average standard of physical and mental development may be raised for a time, but that the non-privileged classes suffer more than in proportion, and that such "sports" as really transcendent genius do not become more common than in a natural democracy.

"Sir Tray: an Arthurian Idyll," in *Blackwood*, is a good parody of some parts of Mr. Tennyson's last volume, which were no doubt open to the implied criticism.

Lessing's Prosa, a selection from his complete works, by A. Luthardt, for the use of schools and families, might supply a want more felt by foreigners than the author's countrymen. Good German prose is not plentiful to begin with, and the best authors in point of style are voluminous and not always didactic. But Lessing's best prose works are short, and both in style and substance deserve on their own account the deliberate study which reading-books receive, though it is half wasted on most of them.

The *British Quarterly Review* (January 1) has an article on Ewald with special reference to his last work, *Die Lehre der Bibel von Gott*, which the writer welcomes as a kind of palinode, modifying his most extreme statements on the subject of inspiration. The reviewer is not much at home in the learned world of Germany, as he makes Professor Max Müller the son of Otfried, the historian, instead of Wilhelm, the poet.

The "Study on Sophokles" in the *Westminster Review* for January is less valuable than most of its predecessors; the writer is too anxious to insist on the philosophical value of Sophokles as a precursor of Plato, finds the immortality of the soul as a religious doctrine in the *Antigone*, and considers the *Oedipus Coloneus* an adequate solution of the problem of human destiny as presented in the *Oedipus Tyrannos*. He is also at superfluous pains to deny the anecdotes which represent the poet as addicted to indulgences which in his age were not incompatible with self-respect. Altogether he is so busy with the claims of Sophokles as a preacher of righteousness that he fails to throw much new light on his characteristics as an artist.

One of the most amusing of Voltaire's blunders as an historian and a maker of compliments was that of apologizing to the Austrian chancellor Ulfeldt for not having, in the *Siecle de Louis XIV*, praised him for the gallant defence of Barcelona by his father some fifty years before. The letter in which Voltaire makes the mistake is not known, but it accompanied the copy of his work which was sent to Ulfeldt, with two others, for presentation to Maria Theresa and the Emperor Francis, and his answer to the chancellor's acknowledgment and correction has just been discovered by Alfred v. Arneth in the imperial archives at Vienna, and published for the first time in the *Vienna Abendpost*.

The Vicomte de Rougé, the well-known Egyptologist, died at Paris early in the month. The *ci-devant* Emperor Napoleon III., who died on the 9th inst., was not entirely without merit as an author. His *Napoleonic Ideas* gave rather inarticulate utterance to a certain measure of confused but original political insight. His *Vie de César*, though without independent scientific value, will rank rather above Frederick the Great's *Anti-Machiavelli* as a literary curiosity; some passages are very creditable specimens of how history may be written when more lion's whelps have learnt to paint.

In the *Allgemeine Zeitung* (January 11) Berthold Auerbach begins an elaborate and rather enthusiastic appreciation of Gustav Freytag's last romance, *Ingo und Ingraban*, parts of which he considers to be nothing less than Homeric.

Mr. W. R. S. Ralston, of the British Museum, author of *The Songs of the Russian People*, and translator of Krilof's *Fables*, has been elected a corresponding member of the ethnographical section of the Imperial Geographical Society of Russia.

Art and Archaeology.

Rossi's and Cibo's Painters of Foligno. [*I Pittori di Foligno. Testimonianze autentiche, raccolte ed ordinate dal Prof. Adamo Rossi. Perugia, 1872. Niccolò Alunno e la Scuola Umbra. Di S. Fren-fanelli Cibo. Roma, 1872.*]

THERE was a time within the memory of the present generation when Italian writers on art produced essays in which real ignorance was thinly concealed under rhetorical flourishes. A great and curious change has taken place in our day; and modern students of the fine arts in Italy are content to register with cold accuracy the fruits of research in the records of municipalities or lawyers' offices. It is quite natural that Italian writers should fall from one extreme into the other; but a pardonable wish may be expressed that they should season their materials with something less dry than the texts of contracts or the bare sentences of inscriptions. Both of the books to which our attention is now directed are made up in a great part of documents; one is published at Rome, the other at Perugia. Both are the result of independent enquiry; yet they treat of the same matters, and are published at the same time. Without attempting to divine what cause induced two writers apparently strangers to each other to enter minutely into the chronology and life of painters so obscure as those who illustrated Foligno in the fifteenth century, it may be useful, in a few sentences, to extract what these contributions contain that is new and useful to the history of art.

Looking back at the earlier periods of development in the cities bordering the valley of the Topino, and comparing the remnants of pictorial productions which they contain with those of more important centres, we observe that previous to 1450 the models most in favour were those of the school of Sienna. To the preservation of one picture in San Salvatore of Foligno we owe our knowledge of Bartolommeo di Tommaso, who cultivated this form of art with moderate success; but a record of 1447, printed by Rossi, discloses Bartolommeo's permanent residence at Foligno, and proves that Siennese tradition was not a transient one, nor entirely dependent on the wandering disciples of a distant school.

The quaint sternness of Siennese types was modified by the Umbrians to a languid softness, which in some artists of the better sort is often charmingly touching. Some traces of this feeling are apparent in Pier' Antonio Mesastris and Alunno, both men of local repute, who were natives and residents of Foligno; but Siennese and Umbrian tradition was modified in both by the spirit and works of Gozzoli. Till now we could only surmise that Alunno and Pier' Antonio contributed to the decoration of Santa Maria in Campis, which Pietro delle Casse founded in 1452 near Foligno. Cibo's quotation from Dorio's history of the Trinci family turns speculation into certainty by establishing that the Crucifixion at Santa Maria in Campis once bore Alunno's name in letters of gold. As this Crucifixion is taken almost exclusively from that of Benozzo at Montefalco, it is more than ever credible that Alunno was Benozzo's assistant. Before Alunno was thus employed, he had doubtless received lessons from a local master; and on this point we obtain some light from Rossi's publication of a will and other papers revealing a painter named Pietro di Giovanni Mazzaforte as the father-in-law of Alunno. We shall presently see that father and son-in-law once contributed to the production of an altarpiece in which the style of Mazzaforte is not to be distinguished from that of Alunno.

The name by which Alunno is known to the moderns is one with which his contemporaries were unacquainted. He

was christened Niccolò by his father, Liberatore di Mariano, of Foligno; but an inscription attached to an altarpiece in San Niccolò of Foligno poetically designates him as "*Alunus* (*scil.* *Alumnus*) *Fulginiae*"; and this designation was substituted, with the concurrence of centuries, for that by which Alunno was familiar in his own age.

The picture which bore the name of Niccolò coupled with that of Liberatore is also that which was executed, in 1465, by the joint labour of Alunno and his father-in-law. It remained till about 1782 in the church of San Francesco at Cagli, and escaped the research of Lanzi; but Lanzi had read a description of it in Colucci's *Antiquities of Picenum*, which reasonably pointed, as he thought, to the existence of an artist of the same name, but different family, who lived at the time of Alunno in Foligno. Rossi's discovery of Alunno's pedigree and alliances allows us to discern the real authors of the Cagli altarpiece, whilst it annihilates the theory of Lanzi. Gucci's description of the subject has revealed to Rossi that the panels now catalogued as Alunno's at the Brera are those which once formed the picture of Cagli, and are therefore the work of two hands.

The texts of Cibo and Rossi help us to relieve with some colour and shadow the bare outlines of the lives of Alunno and Pier' Antonio. Rossi, with fuller materials than his rival, gives the span of Alunno's career as 1430 to 1502, that of Pier' Antonio as 1430 to 1506. He shows how both artists were elected to the honours of the municipality of Foligno; and he traces through records Lattanzio and Bernardino, the sons respectively of Niccolò and Mesastris. He swells with a few names the list of craftsmen whose works were not preserved to our day.

J. A. CROWE.

JEAN COUSIN.

A PROPOS of M. Firmin-Didot's recent work on Jean Cousin, M. Gonse writes to the *Chronique des Arts* a letter in which he protests against the "sens général" of the book. Cousin is in the eyes of M. Gonse a second-rate artist, to whom a great deal of anonymous work has been unfairly attributed. In his zeal to detract from what he considers an exaggerated reputation, M. Gonse has even gone the length of ascribing to Cousin work to which neither the artist himself nor anyone else ever laid claim on his behalf. Cousin, says M. Gonse, engraved ("a gravé") the great mark of Jean le Royer which figures as the frontispiece of Cousin's *Livre de la Perspective*. Had M. Gonse but taken the trouble to glance for a moment at the book in question, he would have found that Jean le Royer engraved the mark himself. In his printer's preface he tells us that Cousin drew the designs on the wood, but that Aubin Olivier began to cut them, and he, Jean le Royer, finished them. So that M. Gonse, in his hurry to circumscribe the suspicious activity of Cousin, was actually carrying to his credit the exercise of one more art. But to return to M. Gonse's vigorous protest against what he terms the general sense of M. Firmin-Didot's book. M. Gonse acknowledges that M. Didot is a labourer in a virgin soil, and confesses that he himself is not specially competent to treat the subject. Now it is, to say the least of it, a curious coincidence that a study, carried on for some years past, of the French Renaissance by the present writer has resulted in substantially the same conclusions as respects the work and claims of Jean Cousin as those to which the venerable author of the *Étude sur Jean Cousin* has arrived. It is true that there is no documentary evidence forthcoming in support of these conclusions; but must we remind a Frenchman that there are facts which are none the less true because they cannot be proved? M. Gonse thinks Cousin a second-rate artist to whom much anonymous work is unjustly attributed: be it so; the only possible reply to such a statement is that those who have made a special study of his acknowledged and authenticated work find in it an accent of strong personal individuality which enables them to recognise his hand in other work as yet neither acknowledged nor authenticated. This unquestionably is the case in the adaptation of the cuts of the *Hypnerotomachia* for the French *Songe de Poliphile*, in

the cuts of the *Entrée de Henri II*, and in the cuts of the *Bible of Jean le Clerc*, all of which may be assigned, on internal evidence, to Jean Cousin. It may be remarked, in conclusion, that such attributions to Cousin as rest on the ground of internal evidence, M. Gonse repudiates, because they are not additionally confirmed by contemporary documents; but as soon as we come to the question of the statue of Admiral Chabot, where we have the written statement of a contemporary fellow-townsmen of Cousin's to back up his claim, M. Gonse immediately shifts his front, and, setting the manuscript aside, claims for himself, in this instance, the right of judging according to the superior and indefinable laws of taste, in preference to following the indications of a narrow archaeological and paleographical criticism. The position here assumed is of course impregnable, and reminds us of the grounds on which Dr. Hermann Grimm based his decision in favour of the Dresden Madonna as the original work of Holbein, *i. e.* its *geistige Wirkung*. However, any sign of interest in the Cousin controversy will be gladly welcomed by students of the French Renaissance; discussion and contradiction stimulate new efforts of research which may bring us nearer the truth, which is now at best very obscure. And when we have placed beyond dispute what is and is not the work of the obscure artist of Sens, we shall be better able to arrange with M. Gonse his appropriate place in the ranks.

E. F. S. PATTISON.

ART NOTES.

The death of Miss Susan Durant took place at Paris on the 1st of January. Miss Durant was well known to the public as a sculptor. She was a pupil of M. le Baron de Triqueti, and has left some creditable work as an evidence of the industry and success with which she pursued her chosen profession. When she failed, it was rather from want of solid and severe training than from any lack of natural ability and taste. A rare width of interests and an even rarer generosity and magnanimity of character had won for her the respect and affection of a wide circle of friends, who deeply lament her untimely and unexpected death.

Professor Anton Springer attacks, in the present number of the *Zeitschrift für bildende Kunst*, Hermann Grimm's *Life of Raphael* in no measured terms. He enters into considerable detail, and sums up with: "Wir sind mit Grimm's Buche fertig. Wir bedauern, dass der wenigstens halbünstige Eindruck der ersten raschen Lectüre bei eingehender Prüfung des Werkes sich vollständig verlor." He adds that he expected to find a certain number of errors and oddities, but he was not prepared for such boundless superficiality as to detail and so little zeal in research as shows itself when the author's mode of procedure is tracked step by step. Professor Springer considers that the root of all Dr. Grimm's mistakes is his incapability for sacrificing his own ideas, however empty or crazy, even when they conflict with evident facts.—In the same number, Bruno Meyer continues his article on the Academical Exhibition at Berlin.

The December number of the *Jahrbücher für Kunstwissenschaft* contains Dr. A. von Zahn's concluding article on the Holbein Exhibition, held at Dresden last year.—A list is given of the literature which was called forth by the famous controversy respecting the two Madonnas. Much amusement seems to have been caused by the correspondent of a well-known English weekly journal having introduced Bruno Meyer into his article as "a descendant of the family who kneel in the picture." Von Zahn calls Dr. Meyer's attention to this contribution to his pedigree.—Dr. Lücke contributes some remarks on pictures in Spain.—Eduard His commences an interesting notice of Urs Graf; and W. Schmidt notices a passage in a letter of Dürer's, and writes also a short article on Michael van Coxcyen.

The *Gazette des Beaux-Arts* for January contains a first article, by M. Henri Delaborde, on Florentine engraving in the sixteenth century; an essay on archaeological research as regards the middle ages, by M. Alfred Darcel; the continuation of Léopold Robert's inedited correspondence, by M. Charles Clément; a review of M. Jacquemart's *History of Ceramic*,

by M. René Ménard; a review of M. Wey's *Rome*, by M. Duplessis; a notice of the exhibition at Nantes, by M. Olivier Merson; a biographical notice of Sir Richard Wallace; a valuable account, by M. Louis Ménard, of the sculptures which have come to light in the recent excavations in the Forum. This notice is accompanied by two engravings from photographs taken from the bas-reliefs on the spot. The one represents a pig, a sheep, and a bull. The execution of this group is very remarkable. The bull is especially fine, and shows a grandeur and simplicity of form which seems to refer it to a good period, possibly that of the Antonines. The other, which is sculptured on the reverse side of the same block of marble, represents a procession of personages dressed in tunics, who appear to be public slaves; they carry in their hands large square tablets, which they lay one on the top of another in the centre. At one end of the composition is the ruminal fig-tree, and at the other a mutilated statue, which appears to be that of Marsyas. M. Ménard confines himself to simple comment and explanation of the groups; like M. Beulé, he suspends further discussion until the publication, by Signor Rosa, of those inferences concerning the topography of the Forum which the learned Italian archaeologist has been enabled to make from the situation of these remarkable monuments.

Dr. Henry Schliemann's excavations on what he believes to be the site of ancient Troy have brought to light a series of objects which suggest to his mind an entirely new interpretation of the word *glaukopis*, as applied by Homer to the goddess Athene. These objects, which have been found at various depths down to 53 feet beneath the surface, are (1) terracotta vases, ornamented with an owl's face and a helmet; (2) similar vases, ornamented with figures composed of the body of a woman with the head of an owl; (3) numbers of small figures with owl's faces, and being for the rest of female form. If he is right in taking these figures to be Archaic representations of Athene, the protecting deity of Troy, the literal interpretation of *glaukopis*, as the "owl-faced," will be obvious. The locality and depth of the find, and the presence of the helmet, satisfy him that he is right. That the figures of the goddess actually had an owl's head instead of that of a female in the early Homeric times, would be a startling announcement were we not aware of the fact that a very Archaic figure of Demeter at Phigaleia had, according to Pausanias, the head and mane of a horse.

New Publications.

- A BOHEMIAN. The Iron Strike and other Poems. Trübner and Co.
 ARMSTRONG, G. F. The Tragedy of Israel's King Saul. Longmans and Co.
 JANIE. Analysis and Specimens of Joseph and Zulaikhe. Williams and Norgate.
 LÜBKE, W. Geschichte d. deutschen Renaissance (Architekten). Dritte Abtheilung. Stuttgart.
 MAINE, E. S. Marchmont of Redlands.
 WÜLCKER, R. P. Das Evangelium Nicodemi in der abendländischen Literatur. Paderborn: Schöningh.

Theology.

Researches on the Epistle to Diognetus. [Ueber den pseudojustinischen Brief an Diognet. Programm für die Rectoratsfeier der Universität Basel von Franz Overbeck, Doctor und Professor der Theologie.] Basel, 1872.

AMONG other literary treasures which perished in the public library of Strassburg under the fire of the Prussian guns, was a manuscript of the Epistle to Diognetus, suspected, apparently with very good reason, of having been the only existing authority for the text of this interesting little work. The first edition—that of Henry Stephens in 1592—was printed from a copy made by himself of a manuscript of which he gives no particular account, and later editions have been founded on the text of Stephens, corrected only by another copy which Professor Beurer, of Freiburg, had made of the

same original. That the manuscript used by Stephens was no other than that of Strassburg seems probable not only from the fact that both possessed the same general features, there being in both the same *lacunae*, accompanied in each case by the same marginal note, and both having the same superscription by which the authorship is referred to Justin Martyr—but also from there being no other manuscript known to exist with which that of Stephens can be identified; so that, with the exception of Stephens' own copy, which is preserved in the Leyden library, Professor Beurer's having in the meantime disappeared, there remains to us nothing but the printed text, not now likely ever to receive much improvement.*

The Epistle to Diognetus, no longer admitted to be a genuine work of Justin Martyr, is nevertheless assigned by the almost universal consent of critics to the age of Justin, or even a somewhat earlier period, and has been hitherto regarded as one of the most precious relics of the age immediately succeeding that of the apostles. The reasons for this opinion are, first, the superscription, which, after enumerating other writings of Justin contained in the same manuscript, adds, with reference to this work—5. Τοῦ αὐτοῦ πρὸς Διόγνητον; secondly, internal evidence, which is thought to point to a time when the Jews were engaged in actively persecuting, and making war upon, the Christians; and there is no time, it is argued, of which this could be said more truly than that of the Jewish insurrection under Barcochba, which terminated A.D. 135. A single reference, moreover, which is made, if the passage has not been misunderstood, to the second coming (*παρουσία*) of Christ as near at hand, has been urged as an indication that the epistle belongs at least to the first half of the second century. It is this view which Dr. Overbeck, in his very complete and exhaustive treatment of the subject, undertakes to disprove. He maintains, on the contrary, that the epistle is a literary forgery, belonging to the post-Constantine era, that the arguments referring it to the second century are of no value whatever, and that it contains the clearest possible internal evidence of its much later origin. I shall not, of course, be able to follow him through all the heads of his dissertation, but a few of them may be noticed.

And, first, let us see how he disposes of the arguments on the other side. Everyone must feel the force of the remark that unless the superscription establishes the authorship of the piece, it cannot retain any validity as to the question of chronology; just as it would be absurd to argue that, although the Rowley poems may not have been actually written by the monk Rowley, yet their inscription to him proves that they at least belong to the age in which he lived. And again, the reference to the second coming of Christ obviously proves nothing. That belief cannot even yet be alleged to be finally dead, and it certainly long survived A.D. 150, breaking out with especial vigour in all times of calamity and persecution. But whatever force this argument might otherwise have, it is rendered altogether nugatory if Dr. Overbeck

* In regard to the "Glasgow Manuscript" of Justin's *Orations*, I am able to say that Dr. Overbeck is more than justified in rejecting Otto's conjecture that this is the copy of the Epistle to Diognetus made by Professor Beurer, of Freiburg, about the same time with that of Stephens. As this manuscript is duly announced by Otto (*Corp. Apoll. Christ. Saec. II.* vol. iii. p. xxv) as the "Codex Glascoviensis, membranaceus formae quadratae, et anno 1453 exaratus, qui teste Haenelio (*l. c.* p. 790) Justin's *Orationes* continet," it may be worth while stating, as the result of enquiries I have made, that the codex entered in the Glasgow catalogue as "Justin's *Orationes*" has nothing whatever to do with Justin Martyr, and the "Codex Glascoviensis" accordingly must henceforth be expunged from the list of authorities for Justin's text. As Dr. Dickson, the Curator of the University Library of Glasgow, who has been most obliging in answering my enquiries, promises a fuller explanation, I need say no more. Only it is perhaps proper to add, in justice to Professor Otto, that he concludes his notice of the Codex Glascoviensis by begging the learned to furnish him with more accurate information regarding it. Haenel or his informant would seem not to have looked beyond the catalogue.

be right in maintaining that the *παρουσία* mentioned in the epistle does not refer to the second coming of Christ at all, but to His sustaining presence in the hearts of His disciples. The words on which the question turns, following some reference to the patient endurance of the Christians, are these:—*ταῦτα τῆς παρουσίας αὐτοῦ δέγματα*, and this passage, Dr. Overbeck maintains, must be the reply to one of the questions which the epistle undertakes to answer; namely, What is the nature of the love which binds Christians together?—a question which would otherwise remain unnoticed. The difficulty arises from the fact that we have only the concluding words of a passage of which the greater part has been lost; but Dr. Overbeck's translation—"These (instances of fortitude and the fact that the more the Christians are persecuted the more they increase) are the signs of his perpetual presence with His disciples," gives a better meaning than if we took *παρουσία* here in the sense which it ordinarily has in early Christian writings. The word, however, has been used in its ordinary signification just prior to where the gap occurs in the text, and whether we are to say with our author that this has misled the critics as to its meaning subsequently, or whether we should rather follow the critics in thinking that its use once in the common signification fixes its meaning for the second instance, I shall not venture to decide. We now come to the third and what may seem the most weighty point of evidence, the reference to the warfare carried on by Jews against Christians. Here the words are—"They (the Christians) are attacked, or warred against (*πολεμοῦνται*), by the Jews as foreigners." Once more the answer of Dr. Overbeck seems conclusive. *Πολεμεῖν* is not necessarily confined to war waged in a formal manner and by armed soldiers, but may be used of any form of hostility, and hostility more or less active on the part of the Jews against the Christians certainly continued long after the reign of Hadrian. The contrary opinion, says Dr. Overbeck, would have strange consequences for Christian literature, and he gives an example from a work ascribed to Hippolytus, in which Susanna, representing the Church, is said to be persecuted by the two elders, personifying the Jews and the heathen. The same argument, he contends, which would refer the epistle to Diognetus to the time of the Jewish insurrection in the reign of Hadrian would justify as early a date for this work, which is nevertheless confessedly a century later. Moreover, the words which follow—"those who hate them are unable to give any reason for their hatred"—distinctly point, he thinks, to a considerably later period than that to which this writing has been hitherto assigned. Whatever might be the case in after times, when hatred of the Christians had become a hereditary sentiment, in the second century at least, Jews could assuredly have assigned a reason for the hatred that was in them.

The evidence, then, of the early origin of the Epistle to Diognetus is, to say the least, very far from conclusive. It is not, however, on any negative arguments that Dr. Overbeck rests his opinion; he has also some weighty considerations of a positive kind to urge in support of his own position. In the first place, the way in which heathenism is dealt with in this composition, as a system of mere gross idol-worship, with nothing behind, is not at all after the manner of Justin and the other early apologists. It is a remarkable feature in those writers that, so far from treating the heathenism in which they themselves had been educated with contempt, as something shallow and pitiful, they treated it with all the earnestness of men who held it to be a positive evil—the work of powers in active opposition to God. In short, it may be said that they continued to believe in it; only instead of believing it to be the true religion, they regarded it as the work of evil spirits. Now in our epistle this feature is

entirely wanting. There is no mention here whatever of the demoniacal origin of polytheism, and hence what more natural than to conclude that it belongs to a period when heathenism had become to a much greater extent than could be the case in the second century a thing of the past, and this theory of its origin, though still prevalent, may have lost much of its importance? Still more contemptuous, and therefore more unlike the genuine apologists, is the writer's brief reference to the "vain and silly doctrines" of the philosophers. Justin Martyr, it is well known, maintained (*Apol.* i. 46) that Socrates, Heraclitus, and other virtuous heathen, were Christians, inasmuch as they lived reasonably. Again, another very noticeable feature in this epistle, and one which does not at all harmonize with the accepted view as to its date, is its treatment of Judaism, which it regards as in no sense a revelation, or founded upon any divine interference, but as nothing more than a mere superstition. The theory of the writer, in fact, is that, previous to the manifestation of God through His Son, God was entirely unknown, and the object of his work is to explain to an enquiring heathen why this revelation was so long delayed. Now this view, as regards Old Testament religion, was a common Gnostic view, but in our epistle there is no trace of Gnosticism. On the other hand, how opposed it is to the view of the apologists of the second century! They freely recognised the Old Testament as a divinely inspired book; they claimed a larger right in it than the Jews themselves, inasmuch as they understood it better; they appealed to its prophecies as the argument which they thought was most likely to be satisfactory to their heathen opponents: whereas in the Epistle to Diognetus there is nothing whatever of all this. But perhaps the most striking evidence of a late origin is that which is furnished by a passage describing the relation of the Christians to the society in which they lived. "The Christians," observes the writer, "are distinguished from the rest of mankind neither by country, nor language, nor customs. Nowhere do they live in cities of their own; they have no peculiar form of speech, nor do they lead a life marked by any singularity . . . They inhabit each one his own country, but as though they had come from a distance. They take part in everything as though they were citizens, and endure everything as though they were foreigners. Every foreign land is to them a home, and their native country a foreign land. They all marry and beget children, but they do not expose their new-born infants. They have a common table, but not a common bed. They are in the flesh, but they live not after the flesh; they live upon the earth, but they are citizens of heaven." And so on, until he adds, "In one word, what the soul is in the body, that are Christians in the world. The soul is diffused through all the members of the body, and Christians are scattered through all the cities of the world. The soul dwells in the body, and yet is not of the body; and Christians dwell in the world, yet are not of the world." Now, to say nothing of the want of earnestness implied in this rhetorical accumulation of antitheses, it may well be asked whether this description does not apply to a time when Christianity was outwardly triumphant and acting upon society as a silent influence everywhere diffused, far better than to a time when it was still engaged in open conflict with heathenism. In the first half of the second century the relation of the soul to the body would hardly have suggested itself as a fitting analogy of the relation of the church to the surrounding world. "The world had then a far too independent existence side by side with Christianity to be regarded as its body" (p. 29). In the theology of the epistle too, Professor Overbeck thinks, he can discover traces of the post-Nicene period. The peculiar terminology indeed of that age we should not expect to find, considering

the form in which the writer has chosen to clothe his thoughts, but there is not a word in his essay inconsistent with the strongest belief in the essential deity of both the Father and the Son, and his doctrine that God can be revealed only through Himself seems to imply an acquaintance with the Nicene theology. This argument, however, is less satisfactory than that founded on the writer's Pauline affinities. The doctrine of the incapacity of man to attain life by his own righteousness is pre-eminently a Pauline doctrine, but after the decease of Paul himself it is one which is not likely to be met with prior to the establishment of the New Testament canon about the close of the second century. It may be doubted, observes our author, whether the system of Paul ever existed *as a whole* anywhere but in its author's head; for some time after his death it seemed to have perished, and in subsequent centuries it has revived only in isolated parts, one at one time and another at another. The appearance, therefore, in this epistle of so distinctively Pauline a notion is quite inexplicable on the accepted theory of the date of its composition.

These are the principal reasons—no doubt they have lost much in my necessarily imperfect statement of them—which have led Dr. Overbeck to assign the Epistle to Diognetus to the post-Nicene age. My summary of his work would be incomplete unless I added that it is part of his theory that the unknown author himself put Justin's name to his composition, and intended that by Diognetus we should understand the teacher of that name mentioned by Marcus Aurelius. Whether the opinion heretofore in favour will now be reversed, or whether the question will simply come to be regarded as one of the many questions which can never be decided, remains to be seen. Where indications of time are so very faint, and where so much is made to depend on our expectations of what ought to be, whereas the unexpected is so often the true, it is by no means easy to come to a conclusion. In this instance, once the Justinian authorship of the epistle be given up, there is no tradition to stand in the way of a late origin. As the work has never been numbered among Holy Scriptures, the controversy may be carried on without heat, and in any future discussion of the subject, it will be impossible to leave unnoticed Dr. Overbeck's learned and ingenious essay.

ROBERT B. DRUMMOND.

Biblico-Theological Lexicon of New Testament Greek. By Hermann Cremer, Professor of Theology in the University of Greifswald. Translated from the German by D. W. Simon, Ph.D., and William Urwick, M.A. Edinburgh: T. and T. Clark, 1872.

THE book of which this is a translation was published in two parts in 1866-67: a second edition appeared at the close of last year. The author was a pupil of Tholuck, and acknowledges himself indebted to Tholuck for the first suggestion of this work. As the title implies, this is not a complete lexicon to the Greek of the New Testament. The author's aim is to illustrate the "language-moulding power of Christianity," as exhibited in the lexical peculiarities of New Testament Greek; to trace the historical development of the technical terms of Christian theology and ethics. Words which are the common property of all writers, sacred and profane, and are used by all without distinction of meaning, have no place in his scheme. That a well executed work of this description must prove of essential service to the student of theology is obvious; but the difficulties in the way of complete success are formidable. No two scholars perhaps will agree in their selection of terms to be explained; for the line which separates words which have really received a Christian tinge from other words, on the exact determination of whose meaning depends the interpretation of

passages of dogmatic importance, is often very faint. On the other hand, the history of interpretation presents many examples of the mischief which results from hastily postulating modifications of meaning; and it is frequently of importance to show that a word has remained *unchanged* in sense. The choice of the vocabulary, however, is the smallest difficulty. The successful execution of a work which combines in itself the lexicon and the commentary requires a union of qualities which is very rare. Unless the writer combine accuracy with breadth of view, delicacy of perception with firmness in the application of principles, he may be a useful companion, but cannot be a trustworthy guide.

Dr. Cremer has produced a work of real value, but it cannot be said that he satisfies every requirement. His vocabulary is incomplete. Making all possible allowance for the difficulty of selection, we cannot but wonder at the exclusion of many words. In the first edition the number of words explained was about 640. The second edition added about 130, *e. g.* πατήρ, βουλή, εὐκρινής, ἐριθεία, καταργέω, μακροθυμία, ταπεινός, πειράζω: the absence of these words from the earlier edition it would be hard to explain. Even now we find no mention of θρησκεία, φρόνημα, εὐλογέω, θέλημα, παιδεία, φύσις, πρᾶξις, σοφία, σημεῖον, σκάνδαλον, μεταμέλομαι, ἐντυγχάνω, μωρός, προσευχή, παράδοσις, πλεονεξία; and this list might be greatly enlarged. The articles on the various words are of very unequal merit: sometimes painstaking, thoughtful, and suggestive; sometimes meagre and superficial. It is strange to meet with an assertion that "ganz selbstverständlich" διαθήκη has the meaning *testament* in Gal. iii. 15, 17; or that ἐλέγχω signifies *convince* or *convict* in John viii. 46, but *reprove* in John xvi. 8. The text of the New Testament is not satisfactorily dealt with: not unfrequently readings respecting which there exists considerable difference of opinion are adopted without remark. Col. ii. 2, for example, is quoted (p. 441 of translation) with the reading, τοῦ μυστηρίου τοῦ θεοῦ ἐν ᾧ κ.τ.λ., no reference being made to any other reading or to the conflict of authorities. The important variants in John i. 18, ix. 35, Rom. v. 1, are not even mentioned. The illustration of the language of the New Testament by means of the Septuagint is worked out with care: the Apocryphal Books, however, are not duly distinguished from the Septuagint proper; nor do they receive their full meed of attention. It is much to be regretted that Dr. Cremer has made little use of the writings of the early Greek Fathers, either for the exegesis of the text, or in illustration of the *usus loquendi*. Notwithstanding these defects, the *Biblico-Theological Lexicon* will prove of great service to the student who uses it with discretion. If he cannot place it among the few books which may be trusted with almost implicit faith, he will receive from it many valuable suggestions and much real help. The second edition is a great improvement upon the first. The additional matter amounts to an increase of forty per cent., whilst the number of words is enlarged by one-fifth. In the first edition the notes on etymology are often crude, sometimes obsolete: in the second this subject is very well handled. Considerable attention is paid to synonyms. It is unfortunate that the English translation has been made from the first edition, having nearly reached completion before the second appeared.

The value of this work for the English reader is most seriously impaired by the unsatisfactory character of the translation. It would be difficult to find a book which more imperatively requires fidelity and clearness of rendering; and yet many of the pages before us (especially in the latter half of the book) might be designed to serve as illustrations of what a translation should *not* be. Fully to substantiate

this serious charge would require much more space than we can command. The most important examples are those which it is most difficult to compress into a small compass. In a long and valuable article on *πίστις*, occupying eleven pages of the translation, at least three sentences out of every five contain some considerable departure from the author's meaning, some distortion, or omission, or unauthorised addition. Of the pages occupied with *διαθήκη* and the doctrine of the Logos, even stronger language might be used. In the article on *ἐκδόβεια*, the argument on the meaning of the word in Heb. v. 7 is turned into nonsense by the rendering of *Beschränkung* in by *hindrance* to instead of *limitation* or *restriction* in: the whole article is most strangely translated. Such examples as the following speak for themselves: *eine andere Hypothese als Gott*, "an hypothesis distinct as is God" (pp. 405, 406); *es ist ernstlicher, als bisher geschehen, zu würdigen, was Beck sagt*, "it is more strictly correct for us, as has hitherto been held, to argue with Beck" (p. 265); *Bewahrung vor dem Tode*, "preservation before death" (p. 395); *was freilich nicht der Fall ist*, "if this indeed be anywhere the case" (p. 442); *die Beschneidung Gen. xvii. 13*, "the dividing in Gen. xvii. 13" (p. 577); *im Dienste des Heiligthums*, "on the side of Heathendom" (p. iv). Some of the most familiar German idioms are repeatedly mistranslated: modifying words (as *fast, zunächst*) are frequently omitted, even when the omission leads to a contradiction of some statement in the course of the same article. Occasionally entire clauses are passed over altogether. Again and again we find the technical terms of theology interchanged; in a theological dictionary this is surely a grave fault. The number of misprints (especially in Hebrew words) is appalling: on p. 333, we notice 12; on p. 335, 11; and in the article on *διαθήκη* (occupying six pages), 50, only eight of which are found in the original. The verification of references, spoken of in Mr. Urwick's preface, has not been very carefully executed: on p. 318, for example, there are four errors which have escaped detection. We earnestly hope that the blemishes which disfigure the translation may be removed in a new edition, and that the praiseworthy effort of the publishers to introduce Dr. Cremer's work to the English public may not be frustrated.

W. F. MOULTON.

TO THE EDITOR OF THE ACADEMY.

Glasgow College,
December 23, 1872.

SIR,—Professor von Otto in the Prolegomena to the second volume of his edition of Justin Martyr, pp. xxvi, xxvii, mentions a Codex Glascoviensis, of date 1453, as containing (on the authority of Haenel) *Justinian Orations*; and, not having obtained any account of it, he indulges in various conjectures as to the character and contents of the MS.

An inquiry recently made regarding it by Mr. Drummond has led me to look into the MS., which is entered in the catalogue of the Hunterian Library as Haenel gives it, but is in reality not a Codex of Justin at all. It should have been described as "*Justinian Orations*." It bears a date at the end, 1453, and contains five pieces in Latin, one of which—the second—has a heading supplied by a later hand, "*Demostenis oratio ad Alexandrum*." The others, I find, on examination, to be the funeral oration of the Venetian admiral, Carlo Zeno, by Leonardo Giustiniani, and Latin translations of the *Third Olynthiac* and *De Chersoneso* of Demosthenes, and of the *Hiero* of Xenophon.

While writing on this subject, I may also mention that the *Evangelistarium Graecum*, numbered Q. 3, 36, in Haenel's catalogue of the Hunterian MSS., is not, as his entry has led many to believe, a duplicate of Q. 3, 35, but a quite distinct and independent MS., which has been bracketed with the other simply in consequence of both having formerly belonged to César de Missy.

WILLIAM P. DICKSON.

Contents of the Journals.

Theological Review, January.—Mr. A. H. Sayce undertakes "a critical examination of Isaiah xxxvi.—xxxix. on the basis of recent Assyrian discoveries." He shows that not only are the two later sections (xxxviii. xxxix.) fragments inserted without any regard to chronological accuracy, but even the longer one (xxxvi. xxxvii.) is a redaction of at least three documents, and involves a confusion of two distinct invasions of Judah, one by Sargon, and one by Sennacherib. The latter circumstance had been already pointed out by the author, in the *Studien und Kritiken*, 1872, and after him by Professor Schrader, in *Die Keilinschriften und das Alte Testament*, pp. 201, 202. Mr. Sayce further remarks that the invasion and conquest of Judah by Sargon was the occasion of the remarkable prophecy contained in Isaiah x. 5–xi. 16 or xii. 6. It has hitherto generally been supposed that the description in Isaiah x. 28–32 is an ideal representation of what the prophet confidently expected, though his fears were not actually realised. But it is much more natural, now that the contemporary Assyrian records justify it, to suppose that those short vivid sentences were evoked by the sad sights of the moment. And yet with respect to Isaiah xx., which by the way has been adduced as a parallel to the supposed "ideal invasion" in Isaiah x., even Mr. Sayce seems to think that it may only be a description of possible contingencies. An analysis of Isaiah xxxvi.—xxxix. leads the author to the following results. Sargon document:—xxxvi. 1 (partly), 4–7, 10, 14, xxxvii. 11, 13, xxxvi. 9b. Sennacherib document:—I. (Primary document) 2 Kings xviii. 13 (partly)—18 [? Isaiah xxxvi. 14], xxxvi. 11–13, xxxvi. 15, 18–20 (with xxxvii. 10, 12), xxxvi. 21, 22, xxxvii. 2–4, 6, 7, 36–38. II. (Secondary) xxxvii. 1, 15–20, 5, 21–35. III. xxxvii. 7, "he shall hear a rumour," and 8, 9a. By the compiler:—xxxvi. 16, 17, xxxvii. 9b, 10.—By some accident, a ponderous and pretentious, but utterly valueless work *On Mankind and their Destiny*, by "an M.A. of Balliol College," has found its way to the reviewer of philosophical books, and has consequently been treated much more leniently than it perhaps deserved. We are much mistaken if the author's philosophical paraphrase (save the mark!) of Genesis 1 is not borrowed from a recent absurd French work.—Mr. Russell Martineau contributes a note on the Seventh Day of the Creation. He remarks that, "*a priori*, it is very curious that the Elohist, who has no tendency to make use of sacred or round numbers" [in spite of Nöldeke and Kuenen; see however the decades in chs. v. and xi.], "... should manage to bring the history of creation into the sacred compass of seven days." The ideas, too, of God resting from His works, and of tracing the origin of sacred things to the earliest age, are not in harmony with what we know of the Elohist. Besides, there is no subsequent mention in Genesis of the sabbath. An analysis of Gen. ii. 1–3 shows that the language is not Elohist. Lastly, "a comparison with Ex. xx. 8–11 makes it evident that our writer is the same as the writer of that version of the Ten Commandments;" and Bishop Colenso (*On the Pentateuch*, pt. vi. § 217, and app. § 107) has shown good reason for regarding the latter as the work of the Deuteronomist. So far then the evidence is against Kuenen's view of the lateness of the Elohist writer. We quite agree with Mr. Martineau that this result follows inevitably from Bishop Colenso's analysis of Ex. xx. But we think he might have gone a step further. If the Elohist had no partiality for sacred numbers, it follows that the recurrence seven times over in Gen. i. of the formulae "And it was so," "And God saw that it was good," and the consequent alteration of the texts are due to some other writer. (Cf. Schrader, *Studien zur Kritik u. s. w.* pp. 12–22.) That writer is not improbably the Deuteronomist, whose free handling as an editor is well known.—T. K. C.

Theologisch Tijdschrift, January.—Strauss' *The Old Belief and the New*, by L. W. E. Rauwenhoff. [Expresses great dissatisfaction at the uncritical estimate of the elements of Christianity, which would better have suited the age of Reimarus.]—Contributions to the determination of the relative antiquity of the historical portions of the "Book of Origenes," by W. H. Koster. [Reiterates with some novelty of detail, and with special application to Colenso, the arguments of Kuenen for a late origin of the portions referred to.]—On some recent important contributions to the Johannine literature, by M. A. N. Rovers. [I. On the researches of Keim, Scholten, Hilgenfeld, as to the tradition which places the Apostle John in Asia Minor. II. On works of Hilgenfeld and Vigilius relative to the genuineness of John xxi.]—Professor H. de Groot on Zarathustra, by C. P. Tiele. [Reply to objections.]—Notices of Alford on Genesis and Exodus [a crude and inconsistent work], and other Biblical works, by Kuenen; also of Schrader's two books on the cuneiform inscriptions. [See *Intelligence*, PHILOLOGY.] Also of Ziegler's *Irenaeus*, and Hugues' *Life of Antoine Court the Huguenot*; by Rauwenhoff.

New Publications.

BIBLE. The Speaker's Commentary. Vol. II. Joshua—1 Kings. Murray.

DELTZSCH, F. Biblischer Commentar über die poet. Bücher d. A. T. Bd. 3: Das Salomonische Spruchbuch. Leipzig: Dörfling u. Franke.

- FRANK, F. H. R. System der christlichen Gewissheit. 2. Hälfte. Erlangen : Deichert.
- HIRSCH, S. R., Rabbiner. Der Pentateuch übersetzt u. erläutert. Dritter Theil : Leviticus. Frankfurt a. M. : Kauffmann.
- KRAUS, F. X. Ueber den gegenwärtigen Stand der Frage nach dem Inhalte u. der Bedeutung der römischen Blutampullen. Freiburg i. B. : Herder.
- MEYER, H. A. W. Kritisch exeget. Handbuch üb. den Brief d. Paulus an die Römer. 5. verb. u. verm. Aufl. Göttingen : Vandenhoeck und Ruprecht.

Physical Science.

The Conifers and the Gnetaceae. [*Die Coniferen und die Gnetaceen.* Eine morphologische Studie. Von Dr. E. Strasburger.] Jena : 1872.

PROFESSOR STRASBURGER was already well known as the author of an important memoir on the fertilisation of *Coniferae* (*Die Befruchtung der Coniferen*, Jena, 1869). He has now published the results of a detailed and comparative study of all the genera comprised in that order, as well as *Gnetaceae*. The prominent Darwinian tendencies of the writer have led him to correlate his numerous observations in accordance with the theory of Descent, and his doing so adds additional interest to investigations which independently of this are of great importance. He constantly keeps in view the principle that morphological characters are the direct expression of the genealogy both of individual forms and of the groups to which they belong. It therefore follows that in its real meaning Classification, if only all the necessary data were known, would involve the genealogy of all organic beings, past and present.

The same principle applies not merely to the individual, but to the organs of which the individual is the aggregate. The history of the development of organs must therefore be regarded as the principal criterion of their homology; and characters depending on position or function become, from this point of view, of secondary importance. A comparative enquiry into the mode of development of a large number of species closely related to each other could not but lead to a more complete knowledge of their affinities than had been already acquired. The study, for instance, of the development of *Welwitschia*, proving the great analogy of its "corpuscles" with the embryonal vesicles of other Phanerogams, reveals a new connecting link between the latter and Gymnosperms.

Again, the application of the same method enables the author to elucidate the still unsettled question of the morphology of the ovule in Gymnosperms. He briefly sums up (p. 238) as follows the results of his investigations:—

i. The female flowers of *Coniferae* and *Gnetaceae* are transformed buds. ii. Each of these flowers is reduced to a naked ovary, destitute of any distinct perianth homologous with that existing in other Phanerogams.* iii. The single envelope of the flower of *Coniferae* is homologous with the outermost of the three surrounding the ovule in *Gnetaceae*, which, being homologous with the carpels of superior Phanerogams, must be considered as an ovary. iv. This ovary contains a single ovule, which is naked in all *Coniferae*, whilst in *Gnetaceae* it is protected by two integuments. v. The integuments in *Gnetaceae* are homologous with the ovular integuments in the higher Phanerogams, though their evolution takes place from below upwards. vi. These envelopes must be looked upon as foliar productions, both in *Coniferae* and *Gnetaceae*. vii. The nucleus of the ovule is formed by the extremity of the floral axis. viii. In both *Coniferae* and *Gnetaceae* the ovary is formed by two carpellary

leaves, which are primitively distinct, but become coalescent by the subsequent growth of their basal portion; in some rare cases, however, they seem from the first to be completely united. ix. The integuments of the *Gnetaceae* being equally developed all round the ovules they enclose, each of them may be considered as a single leaf. x. Any foliaceous formation, such as makes its appearance in many *Coniferae* between pre-existing leaves—as, for instance, the fructiferous scale in *Abietineae* or the cupule in *Taxaceae*—is an outgrowth of the axis. There are no such organs in *Gnetaceae*.

From the above conclusions it appears to Professor Strasburger impossible to continue the use of the term Gymnosperms to include *Coniferae* and *Gnetaceae* in opposition to that of Angiosperms, comprising all other Phanerogams.

Still, since Cycads, Conifers, and *Gnetaceae* differ widely from other flowering plants in having "corpuscles" instead of embryo vesicles, Professor Strasburger deems it advisable to retain them as forming a distinct division in the Vegetable Kingdom, but under less objectionable designations. Influenced by geological considerations, he therefore proposes the terms Archisperms and Metasperms as substitutes for those of Gymnosperms and Angiosperms respectively.

But the studies contained in this memoir have not been confined to the reproductive system. They treat with equal completeness of roots, buds, leaves, and germination. After having carefully detailed his observations upon these points, Professor Strasburger endeavours to show how Archisperms may be grouped together when the various forms of organs are considered as originating from common ancestral sources. Assuming that hypothesis, all Archisperms, fossils included, may be linked together by a genealogical tree. Starting from Cycads, the stem splits into two principal branches: one of these, formed by the *Araucariaceae*, ends with such genera as *Pinus*, *Cedrus*, &c.; the other, composed of *Taxaceae* and *Gnetaceae*, terminates with *Welwitschia*.

C. DE CANDOLLE.

Notes of Scientific Work.

Geography.

Oceanic Circulation.—In the 138th part of the *Proceedings of the Royal Society*, Dr. Carpenter publishes the results of scientific researches carried on during the months of August, September, and October, 1871, in H.M. surveying-ship *Shearwater*. The Mediterranean area was again the field of examination, and among the chief objects proposed was the investigation of the temperature and density of the eastern basin of that sea, to ascertain whether its water corresponds in these respects with that of the western division. The temperature-phenomena of this basin were found to agree in all essential points with those previously determined for the western, though a somewhat higher temperature prevails throughout, due partly to a lower latitude, to the absence of any mountain barrier like that of the Atlas intervening to cool the hot winds of the Sahara, and to a greater removal from the supply of the colder water of the Atlantic entering at the Strait of Gibraltar. The density of the water in the eastern basin is also higher, and near the Libyan coast in 365 fathoms a specific gravity of 1.0302 was recorded. In discussing these results, Dr. Carpenter finds a remarkable contrast between the temperature-phenomena of inland seas and those of the open ocean, founding upon this a strong argument in favour of the doctrine of a general oceanic circulation. The temperatures of the lower strata of the Mediterranean have been found to be nearly uniform throughout, showing clearly that depth *per se* does not give rise to any change in the temperature of sea water occupying a basin which has only a superficial connection with the ocean. In the western and eastern basins the uniform temperatures of the lower strata, 54½° and 57° respectively, agree so well with the mean temperature of the crust of the earth in these regions, and with the lowest winter temperature of the surface—whilst the comparative shallowness of the Strait of Gibraltar effectually prevents the admission of any considerable body of water of a temperature below 54½° from the depths of the Atlantic outside—that "we may fairly assume these temperatures to be the normal of the latitude; and since in the eastern Atlantic, outside the strait, the whole mass of water below 1000 fathoms has a tempera-

* It will be seen that Professor M'Nab (*Academy*, vol. iv. p. 13), from the examination of *Welwitschia*, dissents from some of these conclusions.—Eds. *Academy*.

ture from 16° to 18° below this normal, which cannot be attributed to the action of surface cold in the locality itself, the inference seems irresistible that this depression must be produced and maintained by the convection of cold from the Polar towards the Equatorial area." This view is fully confirmed by observations recently made in the Red Sea, which is cut off by the shallow Strait of Bab el-Mandeb from the deep cold stratum of the Arabian Gulf, and in some parts of which a uniform temperature of 71° has been found from the surface throughout; and the deep temperatures of the Sulu Sea, which, though not ostensibly inland, is shut in by reefs and shoals on all sides, so that it has only a superficial communication with the ocean, present exactly the same contrast with those of the China Sea that the temperature-phenomena of the Mediterranean show when compared with those of the Atlantic. Another important object of investigation in the eastern Mediterranean was to ascertain, by analysis of the gases contained in the deepest water, whether the proportions of oxygen, nitrogen, and carbonic acid correspond with those which had been found in the northern Atlantic to be compatible with the presence of an abundant Fauna; or whether, as Dr. Carpenter suggested in a former report, the stagnation of the deepest part of the Mediterranean basin, in consequence of the want of thermic circulation, is attended by such an excess of carbonic acid and diminution of oxygen as is incompatible with the existence of animal life. The latter view appears to have been fully proved by the observations made. The composition of the specimens of deep water obtained agreed very closely with one another, the percentages being approximately as follow: oxygen, 5; nitrogen, 35; carbonic acid, 60. "Thus it appeared that very nearly the whole available oxygen had been converted into carbonic acid, so that, whilst the proportion of oxygen to carbonic acid was never in the open ocean less than one-third, it was here no more than one-twelfth; a difference fully adequate to account for the paucity of animal life on the deep bottom of the Mediterranean." The dredgings carried on between Sicily and the coast of Africa showed that below a depth of 150 fathoms animal life was very scanty, and Dr. Carpenter is disposed to believe that in the Mediterranean the existence of animal life in any abundance at a depth greater than 200 fathoms will be found quite exceptional, presenting in this respect a striking contrast to "those Marine Paradises which are continually met with in the eastern and northern Atlantic at depths between 500 and 1200 fathoms."

Northern Siberia.—A forthcoming part of *Petermann's Mittheilungen* for this year contains one of those exhaustive geographical compilations which have rendered this journal so valuable in its special branch. The subject is the northmost land of Asia between the mouths of the Yenisei and Lena rivers; and upon the map the routes of every traveller in this far corner of the *tundras*—from the earliest in 1736 to that of Middendorf in 1843—have been traced with the greatest care. The delineation of Middendorf's journey, the latest scientific movement in this region, is specially valuable, since it has never previously been laid down with critical accuracy. The compilation was undertaken for the leaders of the Austrian Arctic Expedition, now believed to be wintering in the neighbourhood of N.E. Cape, to show them how much had been done, and how much more remained to be accomplished, in the way of exact determination of position in this region.

Zoology.

Journal des Museum Godeffroy. Part I.—The issue of the first number of this magnificent journal must certainly be reckoned as an important event in the scientific world, and one which lays it under deep obligation to the munificent originator of it, Mr. Caesar Godeffroy, a wealthy merchant and large shipowner of Hamburg. Mr. Godeffroy has for some years been collecting specimens of natural history from Australia and the South Seas, and for their preservation for the purposes of education and research has established the museum which bears his name. In the short preface of this part we are told that the founder of the museum originated his admirable plan ten years ago; the captains in his service were instructed to collect specimens and report their observations and experiences on geographical points of interest; collectors were sent out on special missions; and artists employed to record on the spot those delicate variations of form and colour which are not unfrequently altogether lost in a dried skin or plant. The new specimens have been distributed through Germany, England, and France to scientific men for description, and their reports, which have hitherto been published in memoirs and journals in several countries, are in future to appear in the new journal. Dr. Eduard Gräffe, who has recently returned from the Pacific, after a ten years' scientific exploration devoted to the objects of the museum, is one of the first who contribute. The papers contained in the present number are:—The Topography of the Navigator Islands, by E. Gräffe, illustrated with maps, sections, and views; the Lagoons of the Ebon group in Marshall's Archipelago, by J. Kubary, who has compiled a vocabulary of the native language spoken at Ebon Island; the Bird-skins collected at Huahine, by E. Gräffe, illustrated with an excellent coloured plate of *Ptilinopus rarotogensis*; Contributions to the History of the Fern Flora

of the Pelew Islands and of Cook's Islands, by C. Luerksen; and Examination of Diatoms from two localities of the South Seas, with drawings, by O. N. Witt.

Tornaria, the Young Condition of Balanoglossus.—Professor A. Edwards states, in the November number of the *American Naturalist*, that the position of Tornaria was formerly considered to be that of a star-fish embryo, its analogy to Brachiolaria being complete. In 1870, however, Metznikoff was fortunate enough to be able to assign to Tornaria a later stage of development, when to his astonishment it changed into an Annelid. In view of the affinities first suggested by Huxley to exist between the Worms and Echinoderms, it was of course very important that Metznikoff's observations should be repeated, and, if possible, the genus of Annelid, of which Tornaria was the young, accurately ascertained. The Annelid raised by Metznikoff was most peculiar, and, in absence of other evidence, he suggested the possibility of its being a young Balanoglossus. Professor Edwards states he has been able during the last summer to raise Tornaria and to obtain young Annelids somewhat older than those observed by Metznikoff; and at the same time to trace the development of the branchiae as diverticula from the oesophagus, as well as to find the young Annelid of Tornaria, a species of Balanoglossus (of which the adult is quite common at low-water mark at Newport and at Beverley, Mass.), but slightly older than those raised directly from the Tornaria stage.

Anatomy of the Limulus.—At the last meeting of the Académie des Sciences, M. Blanchard read a report on the memoir of M. Alphonse Milne-Edwards on the Limulus. It corroborates the observations made long ago by Professor Owen that the nervous centres are contained in the ventral artery, and are in consequence in direct contact with the nutritive fluid. He is unable, however, to give any explanation of this exceptional phenomenon. The Limulus was formerly regarded as belonging to the Crustacea. More recently many naturalists have classed them with the aquatic Arachnida. M. Alphonse Milne-Edwards proposes to form a separate sub-class, to which he applies the name Merostomata.

Chemistry.

The Effect of High Temperature on Diamond and Graphite.—An abstract of a paper on this subject by Professor G. Rose appears in the *Jahrbuch für Mineralogie*, 1872, part 8, p. 873. He finds that diamond undergoes no change either at the temperature at which cast iron melts or in the hottest part of a porcelain furnace; if however it be exposed to the temperature of molten wrought iron, it commences, while retaining its form, to change into graphite. The depressions produced on the face of the diamond by partial combustion are very remarkable; they are triangular, and have such a position on the octahedral faces that their sides are parallel to the edges of the octahedron; they represent faces of a ikositetrahedron. The other triangular depressions naturally occurring on crystals of diamond, and due to faces of the dodecahedron, are not to be confounded with the above. The so-called carbonado that occurs in rounded masses in Bahia behaves differently: at a white heat it throws off fine dust-like particles. It is a somewhat porous form of diamond, and contains a small amount of some foreign substance. The foliated variety of graphite burns far less readily than diamond; the compact kind, on the contrary, is more easily combustible.—The same part of the *Jahrbuch* contains a paper by Professor Knop on his microscopic and chemical examination of the xanthophyllite of the Urals, in which v. Jeremejew found vast numbers of microscopic diamonds. He states that these diamonds have no existence. He finds that the forms which have been declared to be diamonds are really cavities in the rock arising from the removal by solution of some enclosed crystals, and has succeeded in producing the same appearance in a piece of apparently homogeneous xanthophyllite by treating it with acid.

Electrolysis of Itaconic Acid.—The changes brought about by passing an electric current through a concentrated solution of the potassium salt of this acid have been determined by G. Aarland in Professor Kolbe's laboratory, and are described in the *Journal für praktische Chemie*, 1872, No. 16, p. 286. The gaseous products are allylene and carbonic acid; while the solution, after the operation was concluded, was found to contain acrylic acid and mesaconic acid.

Divinyl.—This name has been given by Pfankuch (*Journal für praktische Chemie*, 1872, No. 13, p. 113) to a hydrocarbon having the composition $(C_4H_2)_2$ or C_8H_4 , formed by the distillation of sulphur and barium acetate. During the operation an oily body passes over, which solidifies for the most part on standing; rhombic crystals of sulphur and fine needles of the sulphur compound of the new body separate. On removing the acetone with water, and heating the crystals and oily portion together at 100° with finely divided copper or lead, the sulphur is withdrawn. By subsequent distillation the oily body, divinyl, passes over at 20° . Whether crotylene is identical or only isomeric with divinyl has not yet been determined.

Action of Bromine on Ether.—This reaction has been studied by Schützenberger (*Berichte der Deutschen Chemischen Gesellschaft* 1872

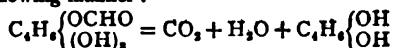
Berlin, 1872, No. 19, p. 1056). By placing bromine in contact with absolute ether in a freezing mixture, there is formed a red crystalline body which melts at 22° , and has the composition $[(C_2H_5)_2O]_2Br$. It deliquesces in moist air, but gives off no bromine. In the course of time it undergoes spontaneous decomposition: water immediately breaks it up into the two constituents. If it be heated to 100° in a closed tube, the contents of the tube form two layers, the upper being a solution of hydrobromic acid, the lower consisting of bromal C_2H_5BrO and an insoluble substance, which has a boiling point of 175° and the formula $C_2H_5BrO_2$.

Black Yttrotantalite.—An elaborate examination of the minerals bearing the name of yttrotantalite has convinced Professor Rammelsberg (*Chemisches Centralblatt*, 1872, No. 50, p. 792) that the dark-brown and yellow yttrotantalite of Ytterby, the grey variety of Gamle Kararfvet, and the tyrite and bragite of Arendal, have the composition of the fergusonite of Greenland, are, in short, compounds of the form $R''Nb_2O_6$, with varying amounts of water. The probability of the correctness of this view had been suggested by a previous examination of individual crystals of these minerals. Nordenskjöld found the black yttrotantalite of Ytterby to have a crystalline form quite different from that of the varieties mentioned, and in this case retained the old name for the mineral. The black kind, as regards the tantalic and niobic acid which Rammelsberg has found in it, occupies a place intermediate between the fergusonite group and the normal $R''Ta_2O_6$ of tantalite, niobite, polycrase, &c., in having the formula $R''Ta_2O_6, R''Nb_2O_6$, R'' being chiefly yttrium, erbium, cerium, and calcium.

Diabase.—A long paper, contributing much valuable information respecting the history of diabase, and giving several new analyses of well-defined specimens, has been published in the *Journal für praktische Chemie*, 1872, No. 15, p. 227, by T. Petersen and R. Senfter. The following are the chief results of their investigation:—1. Diabase always contains a triclinic alkali-felspar, which in the specimens analysed was oligoclase, as well as in most cases a lime-felspar, probably labradorite. 2. A second constituent is augite, the amount of lime in which is about equal to that of the magnesia and iron oxide taken together. 3. A constituent almost as constant, and derived from the augite, is a ferro-magnesian chlorite, the composition of which accords with the usual formula from this mineral. 4. Titaniferous magnetite and apatite are always present. 5. Calcite also, though often in very small amount, is constantly met with in this rock.

The Amount of Ammonia in Snow.—This has recently been determined at Munich by Vogel (*Der Naturforscher*, 1872, No. 50, p. 406) in snow of different temperatures. Freshly fallen snow at $0^{\circ}C$. furnished water that contained 0.003 gramme to the litre; snow at $-3^{\circ}C$, 0.002; and snow that fell at -9° to -15° was entirely free from ammonia. Snow that had lain twenty-four hours on a field which had been manured the previous autumn was found, when melted, to contain 0.012 gramme per litre of ammonia. Other snow that had been for twenty-four hours on the zinc roof of a house had absorbed 0.009 gramme.

A New Glycol.—By reducing erythrite with formic acid, Henninger (*Revue scientifique*, 1872, No. 26, p. 612) has obtained a glycol of the form $C_2H_4(OH)_2$. By distilling the formic ether of erythrite, it splits up in the following manner:—



The new glycol, thus produced, boils at $199-200^{\circ}$, and, when heated with acetic anhydride, forms a diacetate that has the boiling-point $202-203^{\circ}$. By saponifying the monoformic ether, which boils at $190-192^{\circ}$, with baryta, the new glycol is easily obtained in a state of purity.

New Publications.

- FRESENIUS, R. Analyse des Stahlbrunnens zu Homburg vor der Höhe. Wiesbaden: Kreidel.
- GRUENHAGEN, A. Die electromotorischen Wirkungen lebender Gewebe. Berlin: Müller.
- JACOB, O. Die Verbreitung des Nervus Glossopharyngeus im Schlundkopfe und in der Zunge. München: Leutner.
- JOURNAL des Museum Godeffroy. Geographische, ethnographische und naturwissenschaftliche Mittheilungen. Heft I. Hamburg: Friedrichsen und Co.
- MALLET, R. The Late Eruption of Vesuvius. Asher.
- MULSANT, E., et REY, C. Histoire naturelle des Coléoptères de France. Lyon: Pitrat.
- PIERRE, J., et PUCHOT, E. Recherches sur les Produits de la distillation des alcools de fermentation et sur leurs dérivés. Caen: Blanc-Hardel.
- PREYER, W. Ueber die Erforschung des Lebens. Jena: Mauke.
- SANDBERGER, F. Die Land- und Süswasser-Conchylien der Vorwelt. 6-8. Lieferungen. Wiesbaden: Kreidel.
- SAYGEY, E. Les Sciences au XVIII^e Siècle, la Physique de Voltaire. Paris: Baillière.

SOMMER, F., und LANDOIS, L. Beiträge zur Anatomie der Plattwürmer. 1. Heft. Ueber den Bau der geschlechtsreifen Glieder von Bothriscephalus latus, Bremser. Leipzig: Engelmann.

STRASBURGER, E. Ueber Azolla. Jena: Dabiz.

THOMSON, Sir W. Reprint of Papers on Electrostatics and Magnetism. Macmillan.

TOPFER, H. Krystallographisch-chemische Untersuchungen. VI. Reihe. Wien: Gerold's Sohn.

History.

The Great Harris Papyrus. [*Der grosse Papyrus Harris. Ein wichtiger Beitrag zur ägyptischen Geschichte, ein 3000 Jahr altes Zeugnis für die mosaische Religionsstiftung enthaltend.* Vortrag gehalten im philosophisch-historischen Verein zu Heidelberg von Dr. August Eisenlohr, Docent der ägyptischen Sprache an der Universität Heidelberg.] Leipzig: T. C. Hinrichs'sche Buchhandlung, 1872.

THE great Harris Papyrus formed a part of the collection made by Mr. A. C. Harris, late British consul in Alexandria, and recently bought by the Trustees of the British Museum. When found, it measured no less than 40^m50 in length by 0^m425 in breadth: it is now divided into seventy-nine pages. It is dated from the 32nd year of the reign of Rhamse III., son of *Necht-Seti*, and second king of the xxth dynasty. Its most important part has been just published by Dr. Eisenlohr, and contains an account of some historical facts connected with the Exodus.

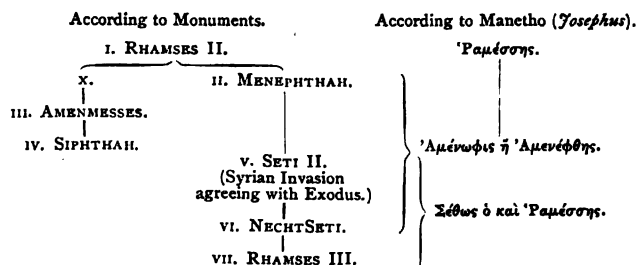
Our knowledge of the Exodus is derived chiefly from two sources: from the Bible, which gives us the Jewish version of the event, and from Manetho's historical work, the fragments of which contain the Egyptian tale of the same event. Manetho represents the Israelites as being leprous outcasts, who, after having been thrown into the Tourah quarries by a certain king Amenophis, were afterwards benevolently released from their bond of servitude and sent to Avaris, the ancient Hyksos stronghold. He identifies Moses with Osarsiph, a priest of Heliopolis, whom they appointed for their leader and took an oath to obey in all things. He then proceeds to relate that Moses, after giving to them laws altogether opposed to the institutions and customs of the land, asked the Shepherds to join in a war against Egypt; which they did accordingly, and committed atrocities far beyond those attributed to the first Hyksos invaders. Amenophis withdrew into Ethiopia with his son Sethos, also called Rhamesses, returned with a great army, and finally ejected the Lepers from Egypt into the borders of Syria, where they settled by themselves. Before Dr. Eisenlohr's publication it was a question with a few critics whether Manetho's tale was a mere reminiscence of Scripture or contained facts derived independently from the sacred annals of the temples. We need now but to read side by side Manetho's fragment and the Harris manuscript to become convinced that Manetho borrowed his version of Exodus from purely Egyptian sources. What remains to be done is to examine the circumstances of his narrative and to compare them with the data of the original monuments, thus discriminating what is historical in it from what is legendary.

And first, about the names. 1. The Israelites are said to be *Lepers*. One of the epithets the Egyptians were so fond of throwing at their enemies was *AATU*, *Pestiferous*, *Lepers*, *Cursed ones*.* It is highly probable that Manetho, seeing the Israelites so termed in old documents, mistook the epithet for an indication of real malady, and transformed the *Aatu* of the monuments into the Lepers of his history. 2. Moses is called *Osarsiph*, an Heliopolitan priest. Osiris' name forms the first element of *Osarsiph* or *Osaróph*; as for the

* Chabas, *Mélanges égyptologiques*, 1re série.

termination -σφ, -σφ or -σφ, it is to be found in Μεντέ-σφ or Μεθέσφ and Σεκούσφ. Μεντέσφ, borrowed from the vith Manethonian dynasty, answers to the hieroglyphical MENT-EM-SA-W, *the god Ment is behind him, the god Ment protects him*: Σεκούσφ is the Egyptian SEBEK-EM-SA-W, *the god Sebek is behind him, the god Sebek protects him*. I think it is safe to consider the final -σφ or -σφ in 'Οσάρ-σφ as being the same as the Egyptian locution EM-SA-W, *behind him*, so that 'Οσάρσφ would be OSAR-EM-SA-W, *Osiris is behind him, Osiris protects him*. The same process of formation appears in ANUB-EM-SA-W, HOR-EM-SA-W, MÛT-EM-SA-W. 3. The invaders of Egypt are called *Shepherds*. *Shepherds* is the translation of the name MENTIU (cf. C. μοοβε, *pascere*), which is given not only to the Hyksos, but to all Asiatic peoples, from the time of the xviiith dynasty to the fall of the Egyptian nationality. The Hyksos were *Mentiu*; so were the Syrians of king Rhamses III. The name of *Shepherds* given to Moses' auxiliaries and the confusion established between them and the Hyksos are thus explained easily, and correcting Manetho's present text according to the preceding remarks, we may gather from his narrative that "a tribe of public slaves, such as were the Israelites of this time, having been released from the quarries and quartered in the neighbourhood of Avaris, revolted under the command of one *Osar-em-sa-w*, the same as Moses. Those *Aatu* sent for help to the *Mentiu*, or Asiatic people, who invaded Egypt and nearly succeeded in conquering it."

According to Manetho, this happened during the reign of one Amenophis or Amenephtes, who has been identified with *Menephtah hotep-hi-mâ*, son of Rhamses II. Sesostri. I have not space enough to develop the considerations that have led me to hold Amenophis, not as Josephus would have it, as being an *invented* king, but as condensing in itself the story and names of two or three different kings, and to sketch thus the royal pedigree of the xixth and xxth dynasties:—



The reasons for this restitution are to be found in a *Lettre à M. d'Eichthal sur les Circonstances de l'Histoire d'Égypte qui ont pu favoriser l'Exode du peuple hébreu*, read before the Académie des Inscriptions et Belles-Lettres of Paris, and shortly to be published in the *Comptes rendus* of the same.

These results differ slightly from those of Dr. Eisenlohr. According to him, "Josephus' Amenophis is to be sought in Menephtah Seti II., and young Sethos is no other than Seti-Necht." But I am happy to see that we agree in placing the Exodus not, "as, is usually supposed, under the reign of Menephtah I., but in the reign of his successor Menephtah Seti II." This is the only time at which the kingdom of Egypt was weak enough to allow a tribe of public slaves to escape with impunity into the wilderness; while the necessity of Israel wandering for forty years is more than sufficiently explained by the subsequent triumphs of Rhamses III. and his conquest of Syria. That conquest and the wars that preceded it will soon be recounted by Dr. Eisenlohr from new documents, the principal of which is certainly the great Harris Papyrus itself.

G. MASPERO.

Roman Public Law. [*Handbuch der Römischen Alterthümer*. Von J. Marquardt und Th. Mommsen. Erster Band.] (Also entitled: *Römisches Staatsrecht*. Von Th. Mommsen.) Leipzig, 1871.

THE second title gives the more accurate notion of this book, which, professedly forming part of a corrected edition of the well-known *Handbook* of Bekker and Marquardt, is really a new and most important work on Roman Public Law. The present volume treats of the Magistracy in general: the second, as we learn from the preface, is to be on the several Magistracies; and a third is to embrace the *civitas* and the Senate. To those who are acquainted with the author's *History of Rome* it will be enough to say that the plan embraces everything which could be desired to supplement that work. Historical students have sometimes complained of Mommsen's "dogmatism": of his habit of giving his conclusions without argument, and even without references to the sources from which they come. The complaint was not perhaps wholly groundless: for though Mommsen has seldom advanced anything which he has not discussed, these discussions are scattered through his various minor works and occasional papers (such as his books on the Tribes, on the Roman Chronology, on the Coinage—to say nothing of the notes to the *Corpus Inscriptionum*), a field of literature which lies beyond the patience and even the bibliographical knowledge of most readers. The present work is admirably suited for all who wish to penetrate beneath the text of the standard histories. The minute learning here shown, the skilful selection and arrangement of authorities, the power of dealing with masses of detail, are qualities at least as remarkable as the eloquence and imagination of the *History of Rome*.

The aim of the work, as the preface explains, is, as far as possible, to extend to Roman Public Law the systematic treatment of which the Private Law is so conspicuous an example. The great merit of Mommsen's *History* lay in his profound understanding of Roman legal conceptions, and his thorough appreciation of their ubiquity and permanence in Roman life. He now presents us with the same thought worked out from the scientific instead of the historical side. The different periods—Regal, Republican, Imperial—are not kept apart, but the materials are arranged according to the filiation of the conceptions upon which they depend. Thus the whole of the present volume is devoted to features common to different Magistracies. Some repetition is unavoidable under this plan; but, on the other hand, there are many points upon which a flood of light is thrown by the mere bringing together of analogous matter.

The difficult subject of the Auspices is first treated. The intimate connection between Auspices and other attributes of the Magistracy is amply brought out, and a good explanation is given of the *Obnuntiatio*—a mode of political opposition which obtained a brief and singular importance towards the end of the Republic. Why it was resorted to rather than the older *Intercessio* is a question which seems to be as yet unanswered.

The subject of the Magistracy proper is introduced by a careful analysis of the conceptions denoted by *magistratus*, *imperium*, and *potestas*. Of these, *imperium* may be regarded as giving the source from which all Roman government ultimately springs—the notion of supreme unrestricted command. The modifications which were gradually introduced—*provocatio*, shortening of tenure, division of functions—are always carried out under forms which show an almost superstitious tenderness for the original institution. Mommsen distinguishes three processes by which the *imperium* was encroached upon: viz. (1) giving practically independent authority to "minor" magistrates; (2) creating more than

one holder of the *imperium*, in other words, the "collegiate" principle; and (3) admitting plebeian magistrates to equal or greater powers, that is to say, allowing an association not coextensive with the community to elect magistrates and pass laws which should have all the attributes of the magistrates and laws of the community. The first of these processes is that by which the wider conceptions of *magistratus* and *potestas* grew out of the original *imperium*. The second is that through which the plurality of supreme magistrates was adapted to accomplish the two conflicting tasks of every community—government in peace and in war. Mommsen has drawn out the various applications of this principle with the most careful elaboration, and has thus enabled us to appreciate the political genius by which an institution in appearance so cumbrous, and even self-destructive, was moulded by the help of a few distinctions—such as "home" and "foreign," original and delegated *imperium*, &c.—and made to yield the most flexible as well as the most vigorous government in all history. The constitutional doctrines thus obtained are not, indeed, new, for they are familiar in their general outlines to the readers of Mommsen's *History*. But in his present work we are able for the first time to understand and admire that union of logical consistency with wise adaptation to varying circumstances which constitutes the peculiar strength and glory of the Romans.

The most interesting part of the volume will probably be found to be the discussion of *Intercessio* (pp. 209–237), especially if read in connection with the expositions previously given of *par majorve potestas* (pp. 56–59) and the *coercitio* of the magistrates in its different forms (pp. 121–141). The distinction made between the right of forbidding (inherent in *major potestas*) and the right of *intercessio*; the treatment of both rights as belonging theoretically to magistrates in general, though of especial importance in the case of the tribunes; the proof that the tribune has *major potestas* compared with the consul—these are the main points which give the exposition its striking and convincing character. We can now understand, for instance, why the Senate applied to the tribunes when Appius Claudius the Censor refused to give up his office at the end of the legal period, and also why the support of three tribunes protected him in his unconstitutional course. Tribunician "intercession" was only available against particular acts, and only on appeal. Any tribune, however, as holder of *major potestas*, could order him to abdicate, and could arrest him (*coercere*) in case of his refusal. But any other tribune, as *par potestas*, could (not forbid, but) "intercede" against his colleague, and so quash the decree or command. By thus separating the positive from the negative action of the magistrates, Mommsen has cleared up many difficulties, especially regarding the degree to which a tribune was dependent upon the support of his colleagues.

The right of the Magistrates to summon the Comitia and the Senate (*jus agendi cum populo, jus referendi*) are treated in an equally luminous and systematic manner. The two rights, it is shown, are essentially correlated, although the tribunes had only the *jus agendi cum plebe*; the fact being that the tribunes never needed the right to summon the *populus*, because full powers were early given to the assembly of the *plebs*. Regarding the election of magistrates, Mommsen adopts (from Mercklin) the suggestion that magistrates with *imperium* had at first the right to nominate colleagues. Under this principle he explains the right of the consul to name a dictator, and promises to prove that the dictatorship is an original part of the republican constitution. The co-optation of the tribunes is historically attested, and in this respect, as in others, it is probable that the plebeians followed patrician precedents. The question when and how

the tribunes obtained the *jus referendi* is reserved for the second volume.

There is abundance of new and interesting matter in the sections which treat of the attendants on the magistrates (*apparitores*), such as scribes, lictors, *accensi*, of the *insignia* of office, and of the honorary rights attached to the holding of office. All such details, with the Romans, were so pervaded by their constitutional doctrines that they are often more instructive than direct statements; and the author's immense knowledge of inscriptions is especially applicable to subjects which lie beneath the surface, as it were, of ordinary historical narrative. We may notice especially the account of the *sella curulis* (pp. 311, ff.) and of the distinction between *ornamenta consularia* and *adlectio inter consulares* (pp. 369, ff.). Questions of this kind, in Mommsen's hands, enable us to understand why nothing is beneath the notice of philology: for a trifling detail of costume or etiquette may be the expression of ideas which have permanently moulded human society.

D. B. MONRO.

Early Roman Law. The Regal Period. By E. C. Clark, M.A. London: 1872.

THIS little book will form a convenient introduction to a department of philology of great and increasing interest, viz. that which deals with the origin and growth of legal ideas. Mr. Clark modestly says that "for readers who may wish to acquire any substantial knowledge of the subject *la sauce vaut mieux que le poisson*"—the fish being his own, the sauce that of Varro and Festus. The text, however—the fish in this comparison—is not unsubstantial, though perhaps somewhat scanty. It is written in a lively style, not always free from obscurity. As Mr. Clark tells us that he has postponed the Decemviral legislation "to a time of greater leisure," we may look upon the present publication as a specimen of his studies rather than a complete work. The chief matters discussed are, the *leges regiae*, the process in the case of *perduellio*, the quaestorship, the *legis actiones*, and the oldest forms of conveyance, adoption, and testament. The process of *perduellio*, with the typical case of Horatius, is happily treated; the idea of allowing appeal in case of murder (*paricidium*) by the fiction of regarding it as treason (acting as a public enemy or *perduellio*) is eminently Roman. The value of the fragments quoted from so-called *leges regiae* is impaired by the extreme uncertainty regarding their date; in any case they are hardly more than regulations of pontifical ritual. Nevertheless they contain many traces of undoubtedly ancient custom, and as such they are skilfully used by Mr. Clark. The treatment of the *legis actiones* is slight; probably Mr. Clark will return to it in connection with the Twelve Tables. On *mancipium* and *nexum*, adoption, testation, &c., there is not much added to the exposition in Sir Henry Maine's *Ancient Law*; but it is convenient to have the authorities arranged and digested. On the side of constitutional history Mr. Clark is not very strong; his knowledge both of the sources and of the modern literature is obviously inferior to that shown in Mr. Seeley's admirable *Examination*. An instance of this is his criticism of Mommsen's view (adopted by Mr. Seeley) that the *patres* in the phrase *patrum auctoritas* are not the senate simply, but the patrician part of the senate. He there confines himself to one passage of Livy (vi. 42), whereas the view in question rests upon several other notices, such as the distinction drawn between *patres* and *conscripti*, and the parallel of the *interrex*, who was apparently chosen, not by the senate at large, but by an assembly of patrician senators. Probably Mr. Clark is not acquainted with the discussion of this curious topic in Mommsen's *Römische Forschungen*.

D. B. MONRO.

The Roman Blood Phials. [*Ueber den gegenwärtigen Stand der Frage nach dem Inhalte und der Bedeutung der römischen Blutampullen.*] F. X. Kraus.

The author, a moderate Roman Catholic, professor at Strassburg, well-known for his archaeological enquiries, here sums up the argument for some of the phials found in the catacombs containing blood, while allowing that most of the red is merely oxide of iron. He thinks they may have been deposited with the bodies of martyrs, "non vindicati," as a means of later identification when the persecution was over, in opposition to Le Blant's view that they were deposited as a kind of amulet in the graves of other Christians, who looked on the blood of the martyrs as a sort of preservative against the evil spirits; but there is no evidence of such a view in early times. The chemical evidence collected is particularly interesting. C. W. BOASE.

Intelligence.

Within the course of the present year continuations of some important historical works may be expected. 'G. Waitz, *Deutsche Verfassungsgeschichte*, of which vol. iv., the second portion of the Carolingian period, was published in 1861, whereas a new and very much altered edition of vol. ii., the Merovingian period, appeared in 1870, will reach in vol. v. the times of the Saxon and Franconian emperors, during which both Church and State in Germany had to undergo the most vital changes. Of W. v. Giesebrecht's *Geschichte der Deutschen Kaiserzeit*, we have the first slight instalment of vol. iv., the emperors Lothar III. and Conrad III., and may look out now with certainty for the complement containing the reign of Frederic I. Barbarossa. After the publication of the last six or seven volumes of Pertz's *Monumenta*, and of a number of documentary collections, the constitutional, ecclesiastical, and economical situation of the twelfth century having been discussed minutely in small and large works by the most competent scholars, there is at last hope of having a readable and trustworthy description of this famous epoch, based on the advanced state of methodical study. C. v. Noorden, *Europäische Geschichte im achtzehnten Jahrhundert*, of which the first volume, down to the battle of Blenheim, was received three years ago with due gratification, is expected to finish, if possible, in a second volume, the War of the Succession in Spain. We trust that this sound work may not be interrupted by its author exchanging at Easter his chair of history in the university of Marburg with that at Tübingen.

A third edition of Wattenbach's *Deutschlands Geschichtsquellen im Mittelalter*, a very meritorious work, and quite indispensable for every student of mediæval history, is likewise in course of preparation, innumerable alterations and additions having become necessary since the last edition in 1866. The most favourable sign, however, of the advance and popularity of historical literature in Germany is the circumstance that Ranke's *Sämmtliche Werke*, a complete collection in about forty volumes, started in 1867, and having reached as yet vol. xxiv., require already a second issue of the beginning. Their veteran author, the father of the modern critical school in Germany, and perhaps the most celebrated historian living, though above 75 years old, is still hale and actively at work, as is proved by the first volume of the new and seventh edition of *Deutsche Geschichte im Zeitalter der Reformation*. The reader will easily discover some curious alterations towards the end of the volume, chiefly owing to a publication of the Old Catholic Professor Friedrich, in Munich, on the Diet of Worms in 1521, from the authentic reports of the papal agent Alexander.

Winckelmann, sein Leben, seine Werke und seine Zeitgenossen, von C. Justi, the first volume of which was published in 1866, has been lately completed by another volume in two parts. This eminent work, a long deserved monument to the memory of the great man, to whose teaching a century of progress in art owes perhaps more than to any other single person, is just now widely read. Critics more or less seem to combine in the conclusion that, though not a masterpiece in every respect, the book, or better the collection of excellent essays grouped around their common centre, abounds in first-rate research, in deep thought about art in general and all its ramifications, and is on the whole brilliantly written, although rather more in a cosmopolitan than a pure national style. Perhaps the author presupposes too much that everybody, like himself, will be acquainted personally, and by a considerable residence in the country itself, with Italian history, life, manners, and feelings. Justi, who has left Kiel to take the chair of history of art in the university of Bonn, is travelling in Spain just now during the winter months.

Dr. Edmund Pfeleiderer, author of a well known work on Leibnitz and his writings, hitherto clergyman in Würtemberg, is appointed

professor of history of philosophy and metaphysics in the university of Kiel.

Among the numerous dissertations published during the by-gone year by young scholars taking their degrees may be noticed: *Kritische Untersuchungen über die Quellen zur Angelsächsischen Geschichte des achten Jahrhunderts, mit besonderer Rücksicht auf die Zeit König Offas*, von Ludwig Theopold, Lemzo, 1872. They are distinguished by researches into the early portions of the Saxon Chronicles, and by an attempt to discover, if possible, some sort of rule in the well-known chronological discrepancies between the annals of the years 754–828. Not only Mr. Earle and Mr. Stubbs—whose books are not overlooked—but even beginners in early English history, may be interested to see how these matters are handled at present by the rising generation of German historians.

Mr. Edward A. Freeman and Professor W. Stubbs have been elected corresponding members of the "Societät der Wissenschaften in Göttingen," in honour of their eminent labours in early English and mediæval history in general.

A book of considerable interest to English people is in the press in Germany: *The Correspondence of Frederick William IV. with Bunsen*. The Emperor of Germany has agreed, after much consideration, to allow these letters to see the light, and the selection and editing of them have been committed to von Ranke, who has also written a preface. The book will contain many curious and important disclosures respecting political and ecclesiastical events.

The bibliographical catalogues, issued by the firm of Vandenhoeck and Ruprecht at Göttingen, and superintended by Dr. Müldener, one of the librarians of the great University Library, are already favourably known abroad, in England, Holland, Scandinavia, Russia, and America. However, it may be useful to state that they continue to be published periodically—generally every six months—as systematic surveys in the chief branches of literature, both German and foreign, and not merely for the use of the trade and libraries. Their arrangement is exceedingly convenient for book collectors and scholars, viz.: a. *Bibliotheca geographica*; b. *B. historica* (history, biography, and politics); c. *B. historico-naturalis, physico-chemica et mathematica*; d. *B. mechanico-technologica*; e. *B. medico-chirurgica, pharmaceutico-chemica et veterinaria*; f. *B. philologica* (ancient and modern languages and archaeology); g. *B. theologica* (Protestant). A series of these catalogues serves as a most curious index of the movement in the different branches of science and literature.

We are sorry to hear of the death, from consumption, of Professor Kachenofsky, of the university of Kharkof, the well-known writer on political economy and international law. He died at Kharkof, on the 2nd of January.

MM. Didot, of Paris, are about to bring out a new edition of Joinville, by M. de Wailly.

New Publications.

- SATTLER, C. Die flandrisch-holländischen Verwicklungen unter Wilhelm v. Holland, 1248–56. Göttingen: Peppmüller.
SCHILLER, H. Geschichte des römischen Kaiserreichs unter der Regierung d. Nero. Berlin: Weidmann.
THANER, F. Ueber die Entstehung u. Bedeutung der Formel: "Salva sedis apostolicæ auctoritate" in den päpstlichen Privilegien. (Academy Reprint.) Wien: Gerold's Sohn.
VOLLMER, A. Quæritur unde Belli Punic Secundi scriptores sua hauserint. Diss. Göttingen: Peppmüller.

Philology.

Herculaneum Voluminum Collectio Altera. Tom. VII. Fasc. 3. Naples: Detken.

THIS new fascicle of the *Herculaneum Rolls* has just been published. It contains *Ignoti librum, cujus titulus haud superfuit*. The lacerated pages treat of Poetry, and thus form part of a group of writings the classing of which is a task far from easy, owing especially to the strange polemical relations subsisting among writings otherwise nearly related to each other.* But for once we may safely dispense with

* Cf. e. g. vii. 107: — (νδ τ) ἀ(ε) κο(δ)ε θ(ε)ω τ(ν) ε(θ)ω — (δν) ο(μ)άτρων συρτα(γ)ή(ν)αι καὶ τὰς (μ)νημονεύσας δοκ(ε)ῖν ἢ (δ)ω(ν) ἰκ(ν) ἀκοῦσε δοκεῖν ἥρωϊκα συμμάτρων σωμ(ε)τ(ν) ἀκούειν, ἀλλὰ (μ)ηνοῦδῃ ἀκούειν κ.τ.λ. ἐκ τῶν ἀρχαίων οὐκεία ῥήματα παρὰ τῶν ἀμύλων κ.τ.λ.

favourable reception to this first volume of the *Ecclesiastical Chronicle*, and will ardently wish to have the whole of it soon in their hands.

When we recollect the number of scholars who have had the intention of publishing this work, or who have recoiled before the enterprise, we can understand that the enterprise of M.M. Abbeloos and Lamy has been environed with considerable difficulties. They have had to copy the texts and to translate them, two long and laborious operations, particularly the second; for, although the style of Bar-Hebraeus is generally pure, limpid, and worthy in all points of the second golden age of Syrian literature, it yet contains many expressions borrowed from foreign languages, of which it is not always easy to catch the sense. Add to this, that the Syriac lexicons at our disposal are extremely imperfect, and we shall be a little more indulgent towards the mistakes which have escaped the attention of the editors of Bar-Hebraeus.

The first volume of the *Chronicle* contains 456 columns of text or translation, and presents the ecclesiastical history of the orthodox and Monophysite Syrians almost down to the eleventh century. Following the custom of the ancient chroniclers, Bar-Hebraeus goes back to the beginning of all things; he introduces the history of the patriarchs of Antioch by that of the pontiffs of the Old Testament. This passage, which is sufficiently short (cols. 1 to 32) seems to supply the place of a preface. Next comes the history of the apostles and the orthodox or Jacobite patriarchs down to the year 1399 of the Greeks or 1088 of Jesus Christ.

The Syriac text is in general sufficiently correct. There are, no doubt, a few errors; but how could they be avoided in a long printed work when the character employed is imperfect, and the compositors are but little accustomed to Oriental type? Here are a few of the more important ones—not that they are of any great moment. Page 45, line 9, *R'doufo* for *R'douf'io*; *ibid.* 14, *Peñ'tso* for *Pets'ho*; 61, 14, *th'raihein* for *th'raioun*; 105, 11, *coursot'houn* for *coursavot'houn*; 131, 9, *schok* for *sok*; 565, 23, *noth'rai* for *not'rai*; 193, 12, we should probably read *oh'do* instead of *hoido*, see note on 2nd col. 2nd last line; 199, 6, *lan* for *men*; 207, 5, *i'en* for *ia'in*; 213, 6, *tal'io* for *thal'io*, see line 11; 215, 11, *m'rahiin* for *m'ra'cin*. We would also point out to the learned editors a few passages which call for revision: 49, 7, 20; 63, 19; 87, 3; 105, 15; 113, 3; 115, 2; 117, 3, 9, 21; 119, 9, 22; 129, 6; 133, 22; 135, 2; 145, 8; 159, 14; 165, 27; 167, 18; 185, 16; 197, 2; 209, 5; 219, 11; 221, 6; 223, 10, see note 2 and page 225; 225, 16; 227, 6, 20; 233, 3; 235, 12, 16, 23; 237, 6, 12; 241, 20; 243, 5; 247, 10, 20; 253, 21; 263, 8; 275, 11; 277, 18; 279, 7; 297, 23; 331, 12; 335, 11; 337, 17; 351, 12; 361, 15; 387, 4; 421, 1, 5; 429, 16.

The works of Bruns and Kirsch, the learned remarks of Bernstein and several other scholars, have shown that the translation of the chronicle of Bar-Hebraeus was an arduous work, even for the part in which we have long possessed the Arabic text. How much more difficult must it be when we have nothing but the Syriac text to guide us. The editors themselves admit that some errors have escaped their attention (p. xxx), and they propose later to indicate all the corrections they have found necessary. We shall see faults like the following removed: Page 122, line 10, *sedem* ('oumro) *Bar-chatib* for *Omar-bar-chatib*; 150–152, *nec quod aegrè erga illum dispositus sim, aliis complacere quaero, for illum vitupero*; 172, 15, *jugulate* for *(manu) percutite*; 184, 24, *tractatus* de festis for *carmina in festa sancta*; 206, 7, *sua eum modestia morigerum reddebat*: this refers, in our opinion, to the emperor, and should be rendered: *sed (imperator) viri sanctimoniam veritus in eum injicere manus ausus non est*; 350, 9, *nolim tamen domestica mea deprimere,*

instead of *ne nimis mea aestimare videar*; 384, 23, *neesse non habeo gravare intelligentiam tuam*, instead of *neesse non habeo depingere intelligentiae tuae*; see also 373, 9; 405, 9; 405, 23; 417, 20; 445, 20. Instead of *pacem illi acceleravit*, p. 409, 33, we should prefer to render *illum cito abstulit*.

But these are only trifles, which do not seriously impair the value of the work. The editors have performed a real service, not only to Orientalists, but to cultivated readers in general, who will highly appreciate the translation of the *Chronicle*, and the historical, bibliographical, and geographical notes by which it is adorned.

L'ABBÉ MARTIN.

De Astrologiae Indicae "Horā" appellatae Originibus. Accedunt Laghu-Jātaki Capita inedita III–XII. Dissertatio philologica; scr. Hermannus Jacobi. Bonn: 1872.

THE subject-matter of Dr. Jacobi's dissertation belongs to a kind of literature that, for obvious reasons, is little inviting for most Sanskrit philologists. Yet the results obtained by scholars like Colebrooke and Weber are well apt to show to what useful ends the study of Indian astrology may be made subservient. It is to the study of that system of perverted ingenuity that we are indebted for the first and strongest direct proofs of the influence of Hellenism on Indian science and quasi-science. And besides, astrological observations enter so largely into the habits of Indian life, past and present, that a knowledge of the general features at least of the system may be safely recommended to every Sanskritist. It would be an unreasonable demand, however, that all should devote their time to so dull a task, and if there only be a few willing to make a more special study of the astrological branch of literature and communicate the results of their labours, that is all that can be required.

Both by his translation and his introduction Dr. Jacobi has proved how fully he acknowledges the relative importance of Indian astrology, especially in its connection with its Greek counterpart. His translation is generally faithful, being based upon the excellent commentary of Utpala, without whose care and industry Varāha-Mihira would, it is most likely, have been utterly forgotten. A still higher praise should be awarded to the interesting introductory chapter in which Dr. Jacobi exhibits a more extensive knowledge of the Greek sources, Firmicus Maternus, Manetho, &c., than, perhaps, any of his predecessors in that walk of literature. As it would be out of place in a short notice to give a more detailed exposition of the contents, we will limit our remarks to a few points.

The question treated of by Dr. Jacobi in his introduction, p. 13, *seq.*, as to the period of the *Gārgi-Saṁhitā*, is far from being so easily solved as he seems to think. To avoid any misunderstanding, Dr. Jacobi would have done well to use the term "author of the *Garga-Saṁhitā*," instead of simply "Garga," for even those who believe in the existence of some man living in no period, and possessed of the felicitous name of Grumbler (*i. e.* Garga), will acknowledge that his authorship is as fictitious as the Sun's and Brahman's.

The question then is whether the book ascribed to Garga dates from about 300 A.D., as Dr. Jacobi opines. It is by no means impossible; but as Varāha-Mihira flourished 550 A.D., and Kālidāsa about the same time, or even earlier, according to Dr. Jacobi himself (see his *Sententiae*, at the end), we ought at the same time to conclude that in the interval between 300 and 500 A.D. changes in language, style, taste, and habits of thought must have gone on at an unusually swift pace. For the difference between Garga and Kālidāsa, Āryabhaṭa and contemporaries, is very great. However that may be, it is dangerous to pronounce or even to dispute about the matter before we have a complete and

readable text of the *Gārgī-Saṁhitā*, were it only to make out whether the whole be from one hand and of the same time, or not.

Among the many good remarks occurring in the dissertation, we point out the most happy rectification of the generally adopted opinion (originally Weber's, if we are not mistaken), that Sanskrit *kemadruma* answers to *χηματισμός*. Dr. Jacobi proves that not this Greek word, but *κενόδομος*, is the term to which the origin of *kemadruma* is to be traced. By the way may be remarked that in the verses quoted from Utpala the reading *arthagamo* is not right; *arthāgamo*, "acquisition of wealth," is meant. As to *arthakshapa*, two lines before, that is no word at all; the word is *arthakshaya*, "decrease of riches," "loss of wealth."

The word *vibudha* (p. 46, l. 22) is wrong, undoubtedly, as the editor has pointed out, but the emendation *budha* will not do, because the latter never occurs, so far as we know, in the sense of "a god," and yet it appears from the parallel passage in the *Brhaj-jātaka* that only a word denoting the same idea can have been intended. A restitution based on palaeological grounds or the similarity of letters will in this case be tried in vain. Therefore we may hold that the error has sprung from another cause, viz. the fact that the passage in the *Brhaj-jātaka* exhibits *vibudha*, which has been substituted for the required dissyllable, of the same purport, in the *Laghu-jātaka*. That dissyllable is *sura*, "a god."

We cannot end this brief notice without giving utterance to our hopes that Sanskrit philology will be benefited by more works from the author, whose first publication is of small compass, but, to use an astrological phrase, augurs so well for the future.

H. KERN.

Intelligence.

The *Daily Telegraph* of January 9 publishes a correspondence between Mr. Edwin Arnold, on behalf of the proprietors of that newspaper, and Mr. Winter Jones, Librarian of the British Museum. The proprietors offer the sum of 1000 guineas to cover the expenses of a fresh expedition to Mosul, under the conduct of Mr. George Smith, on the understanding that the researches be concluded within the space of six months. This very liberal offer has been accepted by the Trustees of the Museum, with the sanction of the Lords of the Treasury, who have allowed Mr. Smith six months' leave of absence from his official duties at the British Museum. Such relics of Assyrian antiquity as may be thought worthy of transport to England are to be presented to the British Museum; and Mr. Smith has agreed to furnish the *Telegraph* with full reports of his proceedings while engaged in the expedition. It is probably the first time that a purely scientific object has been thus subsidised. Our best hopes will accompany the expedition, which appeals even to a wider circle than the deservedly popular "Palestine Exploration Fund." One little thing only is wanted to crown the generosity of the *Daily Telegraph*: a complete abstention from pretentious and sensational writing on the dangerous subject of Assyrian antiquities.

In all directions we notice a growing sympathy on the part of Semitic scholars with the labours of cuneiform interpreters. Dr. Kuenen devotes seven pages of the new number of the *Theologisch Tijdschrift* to the recent work of E. Schrader, already reviewed in the *Academy*. He professes to have been already converted by the careful and methodical examination of the basis of the decipherment by the same writer in the German Oriental *Zeitschrift* for 1870. But he hardly does justice to the merits of M. Oppert, who had already in his most valuable *Expédition en Mésopotamie* offered explanations of particular phenomena for which Dr. Kuenen refers to other scholars, viz. the identification of Abel (Hebel) and the Assyrian *habal* (son), and the elucidation of Assyrian monograms.—A writer, who signs himself J. G., in *Gräfe's Zeitschrift* for December, gives a thoughtful notice of Sayce's *Assyrian Grammar* (also reviewed in the *Academy*). When, however, he represents the author as deriving certain grammatical forms from a foreign source, he forgets the passage on page 2 of the *Grammar*, in which the author expressly guards himself against such an imputation.

Assyrian students will be interested in the following note from *Trübner's Record*:—"Mr. E. Thomas, the well-known Oriental palaeographer and numismatist, has published in his *Early Sassanian Inscriptions, Seals, and Coins* (p. 8), impressions of seven seals from the

record chamber of Sanherib, the Assyrian king. Six of them bear evidently characters which resemble very much the Himyaritic and Ethiopian writing, which similarity has been already observed by Mr. Thomas himself, who calls them Ethiopian seals. At the last meeting of the Royal Bavarian Academy of Sciences, Professor Haug made these seals the subject of a paper, in which he showed that Nos. 2, 3, and 4 contain the same name, which can only be read (from left to right) *Shamshi*. This name he then identified with *Samīi*, who is several times mentioned in the Assyrian inscriptions (in those of Tiglath-pileser IV. and of Sargon), and expressly called *sarrat mat Arbi*, i. e. Queen of the Arabs. The characters on the seal are evidently those which were current in ante-Christian times all over Arabia, since inscriptions in them have recently been found in the ancient Moabite country, and some time ago at Warka, in South Chaldaea. The paper will shortly appear.—S."

An anonymous writer makes this statement in the *Phoenix*:—"It is said that over 100 students are now employed at Yedo, in codifying and simplifying the Japanese characters, with a view of adapting them to the representation of sounds used in foreign languages. A scheme to supply the Japanese with a phonetic alphabet, capable of representing every one of the ninety-two consonantal and vowel sounds, as well as their native sounds, will shortly be submitted by the writer, the characters being founded on the outlines of the present *I-ro-ha*."

Trübner's Record for January 1 contains a translation of "A Buddhist Jātaka from the Chinese," from the 14th kiouen of the *Mahā Parī Nirvāna Sūtra*, by the Rev. S. Beal.

Rabbi Isaac Weiss, editor of the *Mekilta*, and author of a book on the idiom of the *Mishna*, has brought out the first volume of a history of the Rabbinical literature, under the title, *Zur Geschichte der jüdischen Tradition*. Unfortunately, as it is written in Hebrew, it will only be accessible to Rabbinical scholars. M. Weiss is one of the best Talmudic scholars, and, though orthodox, does not shrink from modern criticism. He has even introduced a chapter on the doctrines of the New Testament with reference to the Jewish tradition. We expect impatiently the second part, which will treat of the Talmudic period, for which there are more Rabbinical authorities than for that between the first and second temples.

The first part of Mätzner's *Old English Dictionary* (in continuation of his *Altenglische Sprachproben*) has appeared. It extends only to "at." Judging from this specimen, the work is a considerable advance on Stratmann's. The thorough treatment of the particles, especially, augurs well for the general soundness of the whole.

M. Littré has completed the last volume of his classical French Dictionary.

Contents of the Journals.

Journal of the North China Branch of the Royal Asiatic Society. New Series, No. VI. Shanghai, 1871.—1. Notes on the Shantung Province, being a Journey from Chefoo to Tsiuhsien, the City of Mencius; by J. Markham. [The party started from Yentai (Chefoo) on February 24, 1869. Their route lay through the Tsyhyia district, and the cities Laeyang, Tsimi, Kyachow, Kaumi, Weihsien, Tsingchow-foo, Chechuen, Tsinan-foo, Taengan-foo, whence they ascended the Taeshan range studded with Taoist temples. They then proceeded to Kiufow, the city of Confucius, of which an interesting account is given, as is also of Tsiuhsien, the city of Mencius, which they visited next. The paper also contains detailed accounts of the nature of the ground and the products of the districts traversed.]—2. On Wen-chang, the God of Literature, his History and Worship; by W. F. Meyers. [This is one of the canonical divinities to whom worship is officially addressed throughout the empire of China by imperial ordinance. Twice in each year sacrifices are offered before his altar in every city; and the temples erected in his honour vie with those of Kwan-Ti, the God of War, in popular respect. He is represented either under the form of a dignified and venerable sage, or of a wild unearthly figure; and is connected with the constellation of *Ursa Major*.]—3. The Fabulous Source of the Hoang-ho; by E. J. Eitel. [By Chinese Buddhists the source of this river is connected with the Anavatapta (or Manasarovara) lake, on the northern slope of the Himalaya, whence four rivers are said to issue, viz. the Gangā, Sindhu (Indus), Vakohu (Oxus), and Sītā. The last-named river is said to disappear in the earth, and, after passing through a subterranean channel, to reappear again on the Ashmakūta mountains as the source of the Chinese river Hoang-ho, and flow into the eastern ocean.]—4. Sur les Institutions de Crédit en Chine; par M. G. E. Simon.—5. On the Introduction and Use of Gunpowder and Fire-arms among the Chinese; with notes on some ancient engines of warfare, and illustrations; by W. F. Meyers. [Contests the opinion prevalent as to the discovery of gunpowder by the Chinese, and advocates the claim of India as the birthplace of the invention of explosive compounds.]—6. The Chinese Game of Chess as compared with that practised by Western Nations; by K. Himly. [Shows the close connection of the Chinese game with the Indian and

Persian. The writer demurs to Bland's theory on the Persian origin of the game, and inclines to consider either India or Cambodia as its birthplace.]—7. Note on the Chihkiang Miautz'; by D. J. Macgowan. [The Miautz' or hill-tribes (lit. sons of the soil, or aborigines) are divided by the Chinese into two classes, the civilized, or *shuk*; and the wild, or *sang*. Their daughters are never given in marriage beyond their pale, but girls are sometimes taken from without for wives. They dissent from the prevailing creeds, Confucianism and Buddhism, being worshippers of spirits or demons, and having neither temples nor images. From passages in Chinese historians it appears that during the reign of the last emperor of the Yuen dynasty (about 1333 A.D.) the Miautz' were numerous and formidable in the departments of Chichau and Funghwa.]—8. Notes on the Provincial Examination of Chekeang of 1870, with a version of one of the Essays; by G. E. Moule. [The provisional examination for the second literary degree at Hanchow. 11,000 candidates are said to have entered the examination-yard, of which 112 obtained the degree and 18 were honourably mentioned.]—9. Chinese Chemical Manufactures; by F. Porter Smith.—10. Journal of a Mission to Lewchew in 1801; by S. W. Williams. [The journal of Li Ting-yuen, a member of an imperial commission despatched from Peking to Shudi, in which he narrates his observations in a lively style, and furnishes a fair idea of the civilisation of the people, with notices of their government, customs, and products.]—11. Translation of the Inscription upon a stone tablet commemorating the repairs upon the Cheng Hwang Miao, or Temple of the Tutelary Deity of the City; by D. B. McCartee. [Composed and written by Chên Sie, surnamed Pan-kiau, renowned as a calligraphist, scholar, and wit, about A.D. 1150.]—12. Retrospect of Events in China and Japan during the years 1869 and 1870; by J. M. Canny.

Zeitschrift für Deutsche Philologie, IV. 3.—W. Braune: Untersuchungen über Heinrich von Veldeke. [Proves, chiefly from the rhymes, that Veldeke wrote not in High German, as has been hitherto assumed, but in his native dialect of Maestricht.]—Rückert: Zur Charakteristik der deutschen Mundarten in Schlesien. II. [States as the most general and characteristic feature of these dialects the weakness of their accentuation.]—Kern's *Glossen in der Lex Salica*; reviewed by R. Thiele. [Contains very valuable and original matter very inconveniently arranged. Thiele gives a summary of the phonetics and inflexions of the Frankish language, based on the results of Kern's investigations.]

New Publications.

ABEL, C. Ueber den Begriff der Liebe in einigen alten u. neuen Sprachen. Berlin: Lüderitz.

ARDA VIRAF, The Book of. The Pahlavi Text prepared by Dastur Hoshangji Jamsppji Asa; revised and collated with further MSS., with English translation and introduction, and appendix containing the texts and translations of the Gosht-i Fryāno and Hadokht Nask, by M. Haug, Ph.D., assisted by E. W. West, Ph.D. Published by order of the Government of Bombay. Trübner.

BÖHTLINGK, O., und ROTH, R. Sanskrit-Wörterbuch. 48. Lfg. Leipzig: Voss.

KOSSOWICZ, C. Inscriptiones palaeo-persicae Achaemenidarum. St. Petersburg.

MIKLOSISCH, F. Ueber die Mundarten u. die Wanderungen der Zigeuner Europa's. I. Wien: Gerold's Sohn.

PFIZMAIER, A. Ueber einige Kleidertrachten des chinesischen Alterthums. Wien: Gerold's Sohn.

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Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Saturday, February 1, and Advertisements should be sent in by January 29.

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REGISTERED FOR

SATURDAY, FEBRUARY 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

THÉOPHILE GAUTIER.

IF *Les Jeunes France* had gone to Sir Piercie Shafton for their vocabulary (and they often went further and fared worse), they might have called *Théophile Gautier* "our Resipiscence," though he was the author of *Mademoiselle de Maupin*, which has fair claims to be regarded as the most audacious book of a singularly audacious movement. "Our Good-nature" would perhaps have been a more appropriate, certainly a more obvious, sobriquet, and it would have at bottom included the other. He had a very rich and wholesome nature, which he was not long in discovering was really enough to live upon, and as he grew older, he returned to it with increasing satisfaction. It must be added that the circumstances under which his talent first produced itself were of a kind to give full play to his irreverence and a frankness so unscrupulous as to approach to cynicism, and that the excess of every kind of stimulus which surrounded him had brought on a crisis of over-excitement morbid in proportion to the intense vitality and robust constitution of the patient.

The works of this "period of storms and stress," published during the early years of the revolution of July, are morbid whenever they are serious; *Albertus* (the subject of which was repeated with an immense gain in clearness and suavity in a prose *nouvelle*, *La Mort amoureuse*) is perhaps the best of them, and it shows clearly how unlikely the author was to remain in the repose of nightmares; into which he had only strayed because the craving for the *outré* finds its most obvious satisfaction among horrors. The poem is lurid and voluptuous enough, but all the while the poet is laughing at his own pretensions, and at the method of his school, and when he takes leave of the book with a call for a bottle of burgundy and a volume of Rabelais, we feel no doubt of his speedy recovery; it is simply a want of convictions, strong enough to control and direct the tumult of his desires to some object too distant to be disappointing, which made him hanker after the images of the charnel-house and the Thebaid. All the poems of this period are musical and eloquent, but they are too incoherent, too much the expression of a discontent that founds itself on temporary circumstances to be exactly fitted for immortality, and though the

latest of them, the *Comedy of Death*, has a comparatively developed structure, this only serves to bring out more clearly the poverty of positive thought which underlies its imaginative splendours.

On the whole we are inclined to think that he really did himself less injustice in the outrageous humour of his comic works, though the riotous realism is often carried not only beyond the limits of conventional propriety but of aesthetic decorum. One cannot help laughing at the young men who meet to enact one of the orgies described by Sue, Dumas, and Hugo, when they provide mattresses on which to throw their mistresses out of window, and take off their shoes to trample on them, but one hardly feels that to the great public, which never had the misfortune of living with them, these heroes are really worth powder and shot. His later grotesque, *Une Larme du Diable*, is a good deal more ambitious and upon the whole less satisfactory; such merit as it has is to be found in its absolute *naïveté*, in the frank credulity of the whole thing; it is very profane and not very amusing, but one feels that the author is really trying by such light as he has to fancy what God and His saints talk about in Paradise; it is a favourable specimen of one of Plato's three classes of lies, those which are invented to take the place of an unknown truth.

Certainly there is no reason for ascribing his profanity to anything like intentional disrespect: in one of his later works, the *Roman de la Momie*, published in 1863, he goes out of his way to patronise the plagues of Egypt, and even to rehabilitate the horns of Moses. He was a pagan rather than a rationalist, and when, as he grew older, he opened his eyes under the influence of Baudelaire to the element of petulance there is in neo-paganism, his hearty dislike to the humanitarian jargon by which the Romanticists, from Victor Hugo downwards, tried to compensate the absence of both historical knowledge and coherent artistic aims, took more and more the character of a determined dislike to every possible theory of every kind of progress. The strongest of his personal convictions was expressed by the Oriental proverb quoted by Fortunio, that it is "better to be standing than walking, better to be sitting than standing, better to be sleeping than waking, and better to be dead than sleeping." Such a temper, of course, must deprive the greater part of the ordinary motives of literature of nearly all their interest; nothing remains but to excite the desires by elaborate descriptions

of their objects. The writer confesses again and again that it is a burden to him to have to invent even the semblance of a story to link together the few overwrought *tableaux*, of which two or three are passionate and most are simply sensuous. Throughout we are reminded that we are dealing with an author who had wished to be a painter, and we are not reminded in the pleasantest way. We feel that words are being made to do the work of forms and colours, and that in such work words have only one advantage, which a temperate public might think questionable. When the voluptuous impression has to be built up slowly, touch by touch, as one detail is described after another, a reader who wishes to gloat upon such impressions feels that for him the wish of the Greek glutton is realised, and that he is almost as well off as if he had as long a throat as a crane. And though, even with this drawback, the book has glow and splendour enough to be intoxicating, it leaves more than one unpleasant aftertaste. When Fortunio prides himself upon a collection of gigantic panoramas and dissolving views to supply a background at his choice to the scarcely less theatrical gorgeously of his seraglio in the midst of Paris, it is surprising that an author who makes so many returns upon himself should not have stopped to sneer at the inevitable imperfection of an artificial paradise, even when fitted up regardless of expense. It gives quite a new meaning to the primæval curse, "Dust thou art, and unto dust thou shalt return," when we see that the last outcome of cultivated luxury is to immerse life again in the inorganic splendour from which it was evolved.

It was not an accident that Gautier occupied himself more and more as time went on with *feuilletons*; it may seem a harsh thing to say, and yet we doubt if he would have resented it, the *fêtes* of the Tuileries were after all his realised ideal, so far as it could be realised. No doubt they left something to be desired, no doubt he and the public for whom he described them had to make believe a good deal; but then descriptions of a luxury which never existed, even at the Tuileries or St. Cloud, are rather like a Barmecide's feast, and require the guests to make believe a good deal more. At first sight it may appear curious that the will should be the one element of ordinary human nature which such a writer was never weary of exaggerating; but the will which Gautier idealises is not the will which makes efforts, which conquers difficulties, which carries out plans adapted to circumstances. It is a kind of counterfeit omnipotence, an imperious resolve which excludes the idea of resistance, which is sated with success, and is only roused to desire by the appearance of a difficulty too familiar to be endured, and then must wait in helpless arrogance to be served by opportunity or broken by destiny. It is only in a single work, which, with all its vigour and liveliness, is hardly characteristic (*Le Capitaine Fracasse*), that any ethical effect is produced in the process; and the *Duc de Vallombreuse* is after all a rather pale imitation of "Edyrn, son of Nudd," and the whole story is a picturesque medley of somewhat incongruous elements of which few are original. Chiquita is really a *picaresque* version of *Mignon* and *Fenella*. Sigognac himself is a very superior walking gentleman, a sort of cross between the Master of Ravenswood and Quintin Durward; Augustin and his scarecrow brigands, Lam-pourde and his society of chivalrous cutthroats, are fresher, but the latter at any rate belong rather to the nineteenth century than to the seventeenth; they are simply Romantics of a somewhat extreme type transported back into their golden age, the age before the *Grand Siècle*.

He did not succeed better in *La Belle Jenny*; the story is really on the level of G. P. R. James, and the device of a secret society for correcting the decrees of Providence is

hardly worth the mystery which is ingeniously maintained up to the point when the disclosure would produce most effect, if only there were anything to disclose. The book is put together with the cleverness of a practised workman, but the real value is in the isolated scenes. Gautier only found his full originality and power when he was far away from the novel of action and confined himself to a chronicle of moods and desires. His greatest work is *Mademoiselle de Maupin*, and his most perfect is *Spirite*. Perhaps the fact that his greatest work was produced so early, when he was still under five-and-twenty, may be taken for a sign that he had entered upon a direction in which real progress was almost impossible; considering the perfection of his latest work, it certainly cannot be taken for a proof that he had frittered his powers away. Both turn to a great extent upon the same subject, the perplexities of a hero who does not know whom to love, and yet is in love or half in love with loving. In *Mademoiselle de Maupin*, the beloved meets him halfway to find out what men are like who say they love, and parts when she has found the secret; in *Spirite*, the beloved will not seek, and a series of small fatalities hinders her being sought, and so she has to wait for death until she is free to reveal herself. In both the conception is better than the execution. *Spirite*, with all its beauty, is undeniably thin and pale, and the ideal background is a rather unfortunate and wholly incredible mixture of Catholicism and "spiritualism." *Mademoiselle de Maupin* is almost as much overloaded with discussion as *Wilhelm Meister*; the story stands still while the hero is expounding his objections to Christianity, which may be summed up in a preference of the Venus of Milo to the Crucifix, and while the characters are discussing how *As You Like It* ought to be acted; not to mention such superficial blemishes as the way in which the story varies from letters to narrative and back again. No one can be surprised that the book created a scandal, and yet it might be difficult to assign a reason why it is so much more objectionable than others. Perhaps the nearest approach to give an explanation would be to say that, without being remarkably wicked, it is more than remarkably shameless; morality cannot exist without some kind of conventional decorum, and in *Mademoiselle de Maupin* there is no decorum whatever; apparently because the writer did not understand the meaning of the word. In general his attitude to morality is rather friendly than otherwise; it rather resembles the feeling of a savage who has been impressed by a missionary and is inclined to dilute his teaching for the benefit of still heathen friends. The result of works like *La Toison d'Or* and *Jean et Jeannette*, and even *Celle-ci et Celle-là*, is that, as morality does not exist (having been abolished in the necessary and beneficent reaction against *classiques* and *épiciers*), it would be well to invent a little, especially as a little will go a long way. During his life he was best known by his critical and descriptive works. Their merits are sufficiently obvious. He had a splendid, copious, and precise vocabulary; his attention was always at leisure and never asleep: perhaps both these qualifications may be traced to an intense and unoccupied vitality. In all his works he describes too much, simply because it is easier to attend to still life than to invent incident; not like Balzac, because he attaches himself with the whole force of his genius to every corner of his subject. The same keen and indiscriminate curiosity makes his travels more valuable than his criticism. It is said that he praised for very indolence, because it was less trouble than to invent reasons for a qualified judgment; but the fact is that he cared more for new and vivid sensations than for positive beauty: he gives his measure as a critic by the opening paragraph of *Les Grotesques*, where he lays down as an aphorism that for-

gotten writers are more interesting than classics because there is nothing to find in the latter except what everybody admires because it is the reflection of himself.

Of course there can be no comparison between the intellectual stature of the two men, but perhaps the best way to give an idea of Gautier as a whole would be to call him an irrational Goethe. Both found rest from the turmoil of passion and desire in the clearness and repose of art, but while Goethe worked out his deliverance through a lofty philanthropy and an elaborate scientific culture, Gautier owed his escape to nothing higher than common sense, aided by a wholesome joyous temperament always open to the sweet impressions of external nature. It is the highest praise of the author of *Émaux et Camées* to have preserved and improved his magnificent faculties in the entire absence of any worthy object, to have secreted such pellucid amber to immortalise such quaint and pretty flies.

G. A. SIMCOX.

Shakespeare's Southampton-Sonette. [Deutsch von Fritz Krauss.]
Leipzig: 1872.

THE most characteristic feature of this contribution to Shakespearian literature is that the translator unreservedly adopts Gerald Massey's clever theory of the subject of the sonnets, and with a truly German recklessness treats the ingenious hypotheses of that romance as though they were established facts of history. Thus the very title of the book contains an unwarranted assumption, while the sonnets themselves are arranged in a new order, and headed with such titles as the following:—

- "Elizabeth upbraids Southampton with Infidelity";
- "Elizabeth to her Presumed Rival, Lady Rich";
- "Elizabeth preaches Morality to Southampton";
- "Southampton to Elizabeth after his Return";
- "The Poet to Southampton after a Long Silence."

Massey's theory may be briefly stated thus: Shakespeare, feeling a loyal admiration for his young patron, Lord Southampton, recommends him matrimony as a preservative against the dangers of London and court life. Southampton fixes his affection on Elizabeth Vernon: Shakespeare encourages this feeling, and acts as a literary go-between, writing sonnets to the lady in the person of the gentleman, and to the gentleman in the person of the lady. To make this theory fit the sonnets, we have to suppose that in courting Elizabeth Vernon for Southampton, Shakespeare, "from motives of delicacy," concealed her sex and addressed her as a man. "No favouring star smiles on the lovers," to use the phrase of Herr Krauss: the queen tries to prevent Southampton's marriage, and he leaves England for a time; Elizabeth Vernon suspects that Lady Rich is her rival; meanwhile Shakespeare, in a series of sonnets, expresses the despair of the lover and the jealousy of the lady. At last a secret marriage is accomplished; and Shakespeare, breaking the Prospero's wand of poetry which he had wielded in this commonplace amour, has nothing left to do but to write sublimely about the prospect of his own death. This novel is founded partly on the fact that the publisher of the sonnets dedicated them to a Mr. W. H., and that Lord Southampton's names were Henry Wriothesley; and partly on the passionate desire of modern critics to escape from the simple conclusion that the sonnets express Shakespeare's personal feeling for some unknown individual. In their endeavour to get the poet out of one mess they have got him into another. The position now assigned to him is not wholly unlike that of

Martha in Goethe's *Faust*; except that it becomes almost ludicrous when we assume that Shakespeare employed his genius in the composition of poems on both sides of the amorous debate. While regarding the problem of the sonnets of Shakespeare as involved in the greatest difficulty, I incline to what Herr Krauss describes as "die persönliche Theorie." The arguments which are brought against the possibility of such tender effusions having been addressed to a man, would seem to reveal a want of psychological sympathy and information, as well as unfamiliarity with much modern European literature, as, for example, with Tasso's sonnets to Vincenzo Gonzaga and Michel Angelo's to Tommaso Cavalieri. If any "dramatic theory" must be adopted in order to relieve Shakespeare from the severe condemnation passed on him by Hallam, I should prefer the very subtle hypothesis supported by Simpson, who regards the whole series as a lyrical framework for the expression of successive moods of feeling culminating in a highly wrought Platonic passion. At all events this theory attains its object without the inversion of a bulky pyramid of suppositions upon the single point of the two letters W. H. like that which Gerald Massey has constructed and Herr Krauss has accepted as though it were a portion of the solid substratum of actual fact in history. I am far from denying the ingenuity and learning displayed by Gerald Massey, nor do I hesitate to admit that his romance is more interesting than that of Mr. Armitage Brown or of François Victor Hugo in his French translation. The question for consideration really is whether we are at all justified in assuming as much as Massey's view implies, when we know how easy it is in all matters of emotional utterance to square the expression of the poet with our own pre-established prejudices, and when we are forced to do such violence to the poems themselves as to suppose that many which are obviously addressed to a man were intended for a woman. The old theory of Chalmers, that Shakespeare's sonnets were all written as a compliment to Queen Elizabeth, is scarcely more absurd than Massey's, in relation to many of the verses which Shakespeare is supposed to have written to Miss Vernon for Southampton.

Having said so much by way of protest against the substitution of theories for facts which diminishes half the interest of this translation, it remains to test the literary qualities of the work itself. The ideal to which the translator aspires is a high one. Not only does he preserve the exact structure of the rhymes, but he also tries to reproduce the alliteration, antitheses, and pauses of his original. The result is that on the whole the movement of his version is good. Our ear, in reading it, is satisfied with true Shakespearian cadences, which are in many cases, as, for instance, in Sonnets 30, 60, 90, 109 (pp. 102, 83, 149, 160), well sustained. Where the point of the English turns upon some prolonged conceit (as in Sonnet 87), the effect is not so perfect; nor does Herr Krauss seem sufficiently alive to the necessity of preserving antitheses at any price in the sonnets which, like No. 16, owe all their value to a succession of epigrams. Occasionally his prejudice in favour of Gerald Massey's theory causes him to do violence to Shakespeare's meaning. Thus, for the first quatrain of Sonnet 40:

"Take all my loves, my love, yea, take them all:
What hast thou then more than thou hadst before?
No love, my love, that thou mayst true love call;
All mine was thine before thou hadst this more"—

we get:—

"Nimm alles, was ich liebe, und bekenne,
Ob Du nun mehr hast, als Du schon bekamst?
Nicht Liebe, Lieb! die man die wahre nenne:
Du hattest meine, eh' Du dieses nahmst."

Here Herr Krauss, imagining that Elizabeth Vernon is addressing her rival, Lady Rich, has omitted to translate the emphatic words, "my love," in the first line. In Sonnet 42, starting with the notion that Elizabeth Vernon is writing to Southampton about her rival, the translator makes her allude to Southampton as her "friend"; and to Lady Rich as her "love." Our sympathies are strangely perplexed by the peculiar relation in which the three persons are supposed to stand to each other. Again, in Sonnet 133, the phrase, "I being pent in thee," which is appropriate in the mouth of a man speaking to his mistress, has to be turned into "Ich in Deinen Banden," in order to adapt it to a lady addressing her rival.

Although the general excellence of the translation is considerable, the admirer of Shakespeare's peculiar style in the sonnets will be disappointed when he compares some of his chief favourites with the German. For example, the first quatrain of Sonnet 106:

"When in the chronicle of wasted time
I see descriptions of the fairest wights,
And beauty making beautiful old rhyme,
In praise of ladies dead and lovely knights;"

is rendered thus:—

"Wenn in verschwundner Zeit Erinnerungen
Die Anmuth ich beschrieben seh' und lern',
Wie Schönheit alten Sang mit Reiz durchdrungen
Zum Ruhm verstorbner Frau'n und schmucker Herr'n."

The force of the first line, the point of the second, the charm of the third, and the pathos of the fourth, are all sacrificed. *Schmuck*, I suppose, means "spruce," which is a very stupid rendering for "lovely"; nor are *Herren* exactly "knights." Take, again, Sonnet 73. For the line—

"Bare ruined choirs where late the sweet birds sang;"

Herr Krauss gives us:—

"Zerfallne Dome einst der Vögel Welt;"

and proceeds to translate the pathetic "In me thou seest" by "Ich bin," twice over. Again, in Sonnet 29, he gives us this bad rendering:—

"Wenn ich beweine den Schiffbruch meines Lebens,
Ich, den verstiehs die Menschheit und das Glück,"

for—

"When in disgrace with fortune and men's eyes,
I all alone beweep my outcast state."

Indeed, the translation of Herr Krauss is less interesting to the English critic on account of its artistic merits than as a sign that German *litterateurs* are willing to adopt as fact a fiction which is far less founded upon reasonable grounds, though no less ingenious, than the *Theognis Restitutus* of Frère.

J. A. SYMONDS,

LITERARY NOTES.

Edward Bulwer, Lord Lytton, the patriarch of the circulating library, died on the 18th of January, after half a century of uninterrupted literary activity. He was born in 1805, published poems as a mere boy, as a youth wrote a Wertherian romance (*Falkland*), afterwards disavowed, and a Cambridge prize poem on Sculpture, the only academical distinction besides the presidency of the Union which he achieved. *Pelham*, published in 1828, made him popular; *The Disowned*, *Deveraux*, *Paul Clifford*, and *Eugene Aram* (1832) sustained his precocious reputation. *Godolphin* and *The Chinese Twins*, a satirical poem, were published anonymously according to a plan which he often afterwards adopted, partly perhaps from a curious, half jealous ambition, which made him wish to be always admired afresh, never taken for granted as an already successful author; and partly because his popularity, though always considerable, was

never so deeply rooted that it might not hope to gain by judicious transplantation. In 1833 his *England and the English* appeared, in two volumes of such desultory criticism as is now more habitually served out by the weekly or the daily press. His other miscellaneous essays of this period are somewhat artificial in style, and the influence of Charles Lamb and the eighteenth-century essayists is too distinctly traceable; but, on the other hand, it is certainly better to follow good models than bad or none. The novels of what may be called his second period, *Rienzi*, *The Last Days of Pompeii*, *Harold*, *The Last of the Barons*, succeeded each other rapidly, and yet left him leisure to begin a *History of Athens; its Rise and Fall*, in which he attempted to give their due weight to the literary and social forces at work in the State, and to contribute an occasional pamphlet on the exciting political controversies of his own day; at this time he was a whig. His first drama, the *Duchesse de la Vallière*, was a failure; *The Lady of Lyons* and *Money* keep the stage successfully to this day. Another poem, *The New Timon* (1846), is chiefly remembered for the attack it contains on the then rising glory of the Laureate. *King Arthur*, which shortly followed, remained a favourite with the author, who rested upon it some of his best hopes of a favourable judgment with posterity. In 1849 his style changed again with *The Caxtons*, on the whole his most popular work; *My Novel*, *Night and Morning*, and *What will he do with it?* continued the same vein. *A Strange Story* was a return to the mystical supernaturalism of *Zanoni* and other earlier works. But the veteran novelist had one more and most successful mystification in store for his readers, if, as is stated, *The Coming Race*, an ingenious extravaganza, more like a first than almost a last work, was from his pen. In the *Parisians*, now appearing in *Blackwood*, the old Bulwer Lytton is again easily recognisable. We shall hope to discuss his position and merit as a novelist more fully on the appearance of *Kenelm Chillingly*, announced as in the press, a work of which, we are assured, the author himself thought very highly. Apart from his extraordinary fertility as a writer, little need be said of his life, except that he held office for a short time under a conservative government, was infelicitous in his domestic relations or conduct, and was active in promoting a scheme for pensioning and providing for destitute men of letters. A *quasi* anonymous romance, *Higher Law*, published in 1871, contains a sketch evidently intended for Lord Lytton, and as such more of personality than is usually sanctioned in English literature, but his method of composition is fairly and not unskilfully represented.

The *Quarterly Review* (January) communicates some "Unpublished Letters of the Princess Charlotte," which, though they do not add much to our scanty knowledge of her short life, give us glimpses of a much more original and interesting character than the negatively good young lady whose loss was such a blow to the British public.

The *Volksthümliche Dichtungen* collected by Dr. M. Töppen, chiefly from Prussian MSS. of the fifteenth, sixteenth, and seventeenth centuries, and published in the *Altpreussische Monatsschrift* for November, contain a good many interesting specimens of common place in verse. Their comparison with the *Moderne Lyrik*, very justly ridiculed by C. A. (*Im Neuen Reich*, January 17), suggests a regret that some hundreds of the most obvious sentiments respecting love, money, spring, wine, hope, stars, and destiny, cannot be made copyright in their earliest and briefest shape and reproduction—"gerichtlich verfolgt."

According to the *Gazzetta ufficiale* (January 14) Italy has of late years been inundated with a new and barbarous literature, bearing the appropriately barbarous title *selfelpista*, in which, with some difficulty, we discern a reference to the great work of Mr. Samuel Smiles. Sig. Guerzoni points out with great force that a living national literature must contain something more than biographical fragments and essays on commercial morality; but while doing full justice to the good faith of Cantù, Mantegazza, Belgiojoso, Boccardo, and the other indefatigable *selfelpisti*, he perhaps overlooks the future gain to letters, pure and simple, from whatever influence helps to forward the reorganization of society and to regenerate the national energy.

Art and Archaeology.

WEST FRIEZE OF THE PARTHENON.

IT is well known that, when Lord Elgin removed the sculptures of the Parthenon, he left the western side of the frieze in its original position on the temple, but had casts of this portion made, which have always been exhibited in the British Museum, and are engraved in *Museum Marbles*, viii. pl. 23, 35.

A new set of casts has been recently made from the original marbles, by direction of the Trustees of the British Museum; and a portion of these casts is now exhibited in the Elgin Room, in immediate juxtaposition with the corresponding casts taken under the auspices of Lord Elgin. By comparing the two sets of casts, we see at once how deplorably the surface of the marble has suffered from exposure to the weather in the seventy years which have elapsed since Lord Elgin's casts were made.

I will note these injuries on the successive slabs referring to the plates in *Museum Marbles*, viii., and also to those in Michaelis' *Parthenon*.

Pl. xxiii. Youth on left (Michaelis, iii. 4), *both arms and the face decayed, also horse's head, fore legs, and end of tail*; bearded figure on right (Michaelis, 5), *beard and nose decayed*. Youth on right (Michaelis, 6), *left hand and wrist, nose, right hand, fingers of right hand decayed*.

Pl. xxiv. *Left hind leg of foremost horse* (Michaelis, 7) *wanting from a little above fetlock, left arm of rider* (†).

Pl. xxv. *Left forearm, back and face of hindmost horseman* (Michaelis, v. 10), *hind quarter of his horse, and foreleg of horse behind him decayed*.

Pl. xxvii. This slab has, by some accident, probably the explosion which destroyed the Parthenon, been broken behind the shoulder of the foremost horse. In consequence the plane of the portion of the slab on the right of the fracture is below that of the portion on the left. This inequality has been concealed in the Elgin cast by unsightly botching. The corrosion on the shoulder, neck, and hind quarter of the hindmost horse, which had slightly commenced when the Elgin cast was taken, has spread.

Pl. xxviii. The head of the man (Michaelis, viii. 15) has disappeared. The corrosion on the body of the horse has increased.

In the *Archäologische Zeitung* of Berlin for 1872, p. 31, is an interesting article by O. Lüders on the present state of the western frieze, which he was enabled to examine minutely by getting on the scaffolding erected by Signor Martinelli when he recently moulded the frieze for the British Museum. Herr Lüders notes all the holes drilled in the marble for the insertion of metal reins, &c., and the portions of bronze still remaining on the sculptures.

C. T. NEWTON.

ART NOTES.

We learn from the *Chronique des Arts* that important changes are at this moment taking place at the Louvre in the division of ancient art. In the course of removing several statues and groups from the public gardens, in order to protect them from the effects of the weather, several fragments of Greek work have come to light. In addition to these, the collections have been greatly enriched by the number of works recently acquired. The direction has taken advantage of the opportunity thus afforded for making rearrangements, and has turned its attention specially to the placing in a proper position many statues which have for a long while been left to suffer from an unfavourable light. In the gallery of *Diane chasseresse* have been brought together all the most important examples possessed by the collection which illustrate Greek art from its most ancient date down to the period of Phidias, such as—the bas-reliefs from the architrave of the temple of Assos, in Asia Minor; those which were brought back by M. Miller some years ago from the island of Thasos; the fragment of the frieze of the cella of the Parthenon and the metope from the same temple, formerly acquired by the Count de Choiseul-Gouffier; the funeral urns found at Marathon; the bas-reliefs brought back from Macedonia by M. Heuzey, &c. The bronzes taken from the Tuileries,

and several antique fragments, are destined to decorate the grand entrance of the museum at the *Pavillon Deuon*, as well as the gallery which extends from this pavilion to the foot of the staircase. The following are some of the examples which have recently found a place among the antiques:—A magnificent torso of Apollo; another of Perseus; a charming partly draped Venus, and several fine heads from the Campana collection; a very fine torso of one of the numerous repetitions of the Sleeping Faun; a Bacchus, and a Venus from the gardens of the Luxembourg; a head of Caesar, admirable in character, from the Élysée; a torso of a young man, a very refined bit of Greek work, given to the Louvre in 1871 by M. Guillon, the sculptor; a head of Jupiter, of Greek work, which bears traces of colour; a small head of a young laughing Satyr.

Professor Dr. Karl Lemcke, the well-known author of *Populäre Aesthetik*, living at that time as Honorarius at Munich, has received a very flattering invitation from Amsterdam, and has accepted the post of professor of aesthetics and art-history at the Academy of Arts in that city.

The January number of the *Zeitschrift für bildende Kunst* contains an article in memory of Heinrich Petri, by Jacob Falke. Petri was born in 1833, and entered the Düsseldorf Academy when about nineteen. For some time his special tendency in art did not develop itself; ultimately he fell in with Deger, and the word went round that "Petri ist unter die Nazarener und Heiligenmaler gegangen." The article is accompanied by an illustration, an engraving from Petri's altar-painting of the "Taking Down from the Cross," the original of which is in the church of the Franciscan nuns at Nonnenwerth; this is not, however, held to be the most worthy of notice amongst this artist's work. The great altar-piece which he completed in 1871 for Lisbon lays claim to being considered his *chef-d'oeuvre*. In consequence of the success of this work he received a second considerable commission, which he did not live to execute.—C. Claus contributes a notice of the Meyer collection at Dresden, which is accompanied by an admirable engraving after Meissonier by Friedrich, and also by an engraving by the same artist after Achenbach; both the originals are in the Meyer gallery.—G. Keleti continues his notice of Karl Markó.—Phil. Silvanus comments Hubert Stier's design for the German Houses of Parliament.—Bruno Meyer continues his critique on the exhibition of the Academy at Berlin. Alma Tadema's work has excited much interest, but Bruno Meyer seizes with a true instinct on the weak place in the work of this admirable artist, *i.e.* that he too often, instead of giving us a picture, gives us an illustration; that, instead of striving after the universal elements of human interest, he is too often contented to take up his stand on mere archaeology.—A. Horowitz begins a series of articles on "Kunstgeschichtliche Miscellen aus deutschen Historikern," which promise to contain many valuable and interesting odds and ends of information on German art.

Dr. Wilhelm Lübke has published the address delivered by him to the Art School at Stuttgart on the occasion of the celebration of the birthday of the King of Württemberg, under the title *Ueber Kunstpflege*. He reproaches the modern German bourgeoisie with being behind their ancestors in zeal for art; for anything like monumental art, he says, they have been beholden to princes, and points out that in this respect the South is far inferior to the North. Whilst towns like Leipzig, Hamburg, Bremen, have founded their own museums, whilst Frankfurt has its Städelsches Institut, and Köln its Wallraffsches Museum, "was können wir dem in Süddeutschland gegenüber stellen?"

The present number of *Im Neuen Reich* opens with an article on the early development of painting in the Netherlands from the pen of J. A. Crowe, which will prove worth the attention of art students. Mr. Crowe treats with pains and acuteness the obscure question of Hubert van Eyck, and also adds some details concerning the scholars of the two brothers. The article has the value of accurate technical archaeological knowledge.

The Queen has recently presented to the British Museum the bronze figurehead of a small ancient vessel, probably a barge, which was dredged up in the harbour at Actium in 1839, and was obtained at that date by Sir Howard Douglas, then Lord High Commissioner of the Ionian Islands, from whose family Her Majesty received it. The figurehead represents a female bust, helmeted, and with an Aegis on the breast, which may represent Rome. The style of this bronze is coarse, but forcible, and its date may very possibly be that of the battle of Actium, on the site of which it was found. There is an interesting notice of this figurehead in the *Transactions of the Royal Society of Literature*, 2nd series, i. p. 246.

A. Horawitz has called attention in the *Zeitschrift für bildende Kunst* to the following passage in a work of Beatus Rhenanus, which may be regarded as deciding finally in favour of Augsburg's claim to the honour of giving birth to the younger Holbein:—"Apud Germanos hodie sunt inter primos clari, Albertus Durerius apud Norimbergam, Argentorati Joannes Baldwynus, et in Saxonia Lucas Cronachius, apud Rauricos Joannes Holbeinus Augustae Vindelicorum quidem natus, verum jamdiu Basiliensis civis, qui Erasmus nostrum Roterodanum anno superiori in duabus tabulis bis pinxit felicissime, et cum multa gratia, quae postea sunt in Britanniam transmissae" (Beatus Rhenanus Selezeftadiensis *In C. Plinium*, Basileae, apud Joannem Frobenium, mense Martio, anno 1526, p. 29). The passage was probably written in 1525, as the portraits are said to have been painted "last year," while we learn from two of Erasmus' letters, bearing date respectively June 3 and September 4, 1524, that he had then recently (*nuper*) sent two portraits of himself by an "artifice satis eleganti" to England.

The following are some of the highest prices fetched at the sale of the collection of M. Théophile Gautier, which took place at the Hôtel Drouot, as previously announced, on January 14th and 15th:—P. Baudry, "Diane au repos," 6000 frs.; L. Bonnat, "Pasqua Maria," 3700 frs.; Eug. Delacroix, "Lady Macbeth," 7000 frs.; Delacroix and Poterlet, "Combat du Giaour," 3350 frs.; W. Diaz, "View in the East," 4000 frs.; Gérôme, "Panther," 8100 frs.; Ingres, "The Three Great Tragic Poets" (Aeschylus, Sophocles, and Euripides), 3600 frs.; Th. Rousseau, "Forest Scene by Moonlight," 3000 frs. Amongst the drawings, the largest sum was given for Decamps' "Dance of Albanians," 2220 frs.—The Sedelmeyer sale attracted great attention at Vienna at the close of December. A Rembrandt, "Portrait of a Young Woman," went for 8290 fl.; Ostade's "Bauernunterhaltung," 8500 fl.; Teniers' "Flemish Interior" went to 15,000 fl.; and Ruysdael's "Oakwood" to 18,500 fl. Amongst the modern pictures, "An Artist's Atelier," by Stevens, went for 8500 fl., and Knaus' "Mutterglück" for 15,010 fl.

We learn from the *Chronique des Arts* that M. Jean Gigoux intends to sell his collection of drawings of the French school of the eighteenth century. This collection, into which neither doubtful drawings nor copies have been admitted, contains all the most valued names of the eighteenth century, the two Saint-Aubin, Carmontel, Chardin, Watteau, Boucher, &c. &c. Want of space is M. Gigoux's motive for parting with them; he finds himself overburdened by his collections of drawings of the Italian, Dutch, and other schools.

Mr. Henry Woodward, of the British Museum, proposes in the *Athenaeum* to explain the singular object painted in the foreground of Holbein's picture of the "Two Ambassadors," now exhibited in the Gallery of Old Masters at Burlington House. The object has hitherto been taken for the bones of a fish, the shell of a *Venus*, a roll of parchment, &c.; but Mr. Woodward conceives it to be the image of a normal human skull distorted in a cylindrical or convex mirror. If viewed from a point close to the edge of the frame on the right-hand side, the skull loses its elongated appearance, and "erects itself into a well-shaped human cranium." He adds an engraving after a drawing by Mr. de Wilde.

New Publications.

- BRATUSCHEK, E. Adolf Trendelenburg. Berlin: Henschel.
COLERIDGE, H. J. Life and Letters of St. Francis Xavier. Vol. II. Burns, Oates, and Co.
CONZE, Alex. Römische Bildwerke einheimischen Fundorts in Oesterreich. 1. Heft: Drei Sarkophage aus Salona. (Academy Reprint.) Wien: Gerold's Sohn.
FÖRSTER, F. Kunst und Leben. (Nachlass.) Herausgegeben von H. Kletke. Berlin: Paetels.
HAYWARD, A. Biographical and Critical Essays. Longmans.
HEHN, V. Das Salz: eine kulturhistorische Studie. Berlin: Bornträger.
HOFMANN, Konr. Ein katalanisches Thiarepos v. Ramon Lull. (Academy Reprint.) München: Franz.
HOLLAND, H. Moriz von Schwind, sein Leben und seine Werke, aus des Künstlers eigenen Briefen und den Erinnerungen seiner Freunde zusammengestellt. Stuttgart: Paul Neffs.
JEITTELES, Ad. Mitteldeutsche Predigten (aus *Germania*). Wien: Gerold's Sohn.
JOSHUA DAVIDSON, The True History of. (2nd edition.) Strahan.
KONEWKA, P. Zerstreute Blätter. Herausgegeben von F. Keppler. 2. Lieferung. München: Beck.
LESSING, G. E. The Education of the Human Race. Translated from the German by Frederick W. Robertson. King.
LYTTON, the late Lord. Kenelm Chillingly. Blackwood.
PAGE, H. A. Memoir of Nathaniel Hawthorne, with Stories now first published in this country. King.

Theology.

- A Commentary on the Psalms. By George Phillips, D.D., President of King's College, Cambridge. Two Volumes. Williams and Norgate, 1872.

THIS *Commentary*, as the author informs us in his preface is "to a great extent a recast of the work on the Psalms" which he published in 1846, but differs from that work (1) "by many corrections and amendments in every part," and (2) by the substitution in numerous passages of "a new commentary and new criticisms" for the old. These changes he regards as of sufficient importance to give to the *Commentary* in its present form the character of a new and independent work. Still, a great part of the earlier publication remains unchanged. The introduction, for example—which consists of three chapters: (1) on the authorship and arrangement of the Psalms, (2) on the character of the Hebrew poetry, and (3) on the titles of the Psalms—is little more than a reprint of the introduction of 1846. These chapters are, in consequence, necessarily defective; the middle one singularly so, as its historical sketch of opinions as to the character of the Hebrew poetry stops with Lowth, no mention being made in it even of Herder or Ewald.

The earlier introduction contained a fourth chapter on Principles of Interpretation, the omission of which in the present publication is significant, and points to a change of view on the part of the author, the nature and direction of which will appear by comparing a single sentence of the omitted chapter with a portion of the new preface. In the former the author wrote, "My plan in the following Commentary has been to make the New Testament as much as possible a key for understanding the Old": in the latter he says, p. vi, "It has been my earnest endeavour to leave the Psalms to speak for themselves, to tell their own tale"; and again, p. vii, "For myself, I must say that the internal evidence is that on which I have usually depended, as the basis of a Messianic interpretation. If, in addition to this evidence, the Psalm was quoted in the New Testament, and

there treated as a prediction of the Messiah, I felt sure of such an interpretation being the correct one." In other words, the author, in the earlier commentary, followed the New Testament as his primary guide; in the present work he assigns to it only a secondary place. And, in doing so, he has but conformed to the requirements of modern criticism. For now a commentary is nothing if it is not grammatical. But what we find in the New Testament is not a grammatical interpretation but a spiritual exposition of the Old. In citing Old Testament utterances, the object of the first Christian teachers was not to set forth the actual truth which they disclosed, but rather to bring to light the germs of hidden truth which they concealed, not to elicit the doctrines and lessons which they plainly taught, but those rather which, when spiritually interpreted, they were capable of teaching. But to make this spiritual use of the Old Testament is not, to say the least, the first duty of an interpreter now. His first duty is to ascertain the grammatical import of the document before him. When this is done, he may proceed to search for deeper meanings; but if this is left undone, he builds without a foundation, and his labour is lost.

Dr. Phillips, however, does not uniformly adhere to the new canon of interpretation by which he announces his intention to be guided. It is quite evident that, though his judgment approves the new method, his sympathies are still on the side of the old. And, consequently, much of the earlier work is allowed to remain which would certainly have been altered had he been able to carry out his new view with perfect consistency. Thus, in his exposition of Psalm cix., which he still "inclines" to think Messianic, he says, "My first reason for this preference is that such interpretation has the support of the New Testament" (alluding to the citation in Acts i. 20). His second reason is that he thinks the Psalm will bear this interpretation quite as well as any other. But if he had in this case acted on the principle of allowing the Psalm, in the first instance, to "speak for itself," without reference to the citation in Acts, which he certainly would have done had that much misused citation been out of the way, he could not have failed to perceive how alien is much of the language of this Psalm from the spirit and teaching of Christ.

There are other similar instances in which the Psalms are, quite unintentionally, as we fully believe, subjected to undue pressure, in order to draw from them New Testament facts or doctrines. Thus, by *Adonai*, in Ps. cx. 5, is understood the Messiah. The *Rock*, in lxi. 4, is Christ. The words, "Thy loving kindness is better than life," in lxiii. 4 (3), are thus expounded: "The mercy through which life to come is obtained is of more value than that by which we enjoy the continuance of this life." And, to take one instance more, Ps. l. 8, "I will not reprove thee for thy sacrifices," &c. is paraphrased as follows: "I do not, saith God, complain of sacrifices not being offered . . . Do not, however, think that these are of themselves particularly pleasing to me . . . But I design by these oblations to lead you to that one great oblation which I accept as an atonement for the sins of all mankind. This great oblation will be made of which yours are the types," &c. Now we think that the author, in all this, under the unconscious influence of his personal beliefs, has lost sight of the excellent canon which at the outset he formally adopted as his guide, viz. "to elicit what may be termed the natural sense of a Psalm, such as, with reference to the circumstances under which it was written, so far as they can be ascertained, seemed the most probable; and with that sense to remain content" (Preface, p. vii).

Still, this *Commentary* contains a great deal of valuable matter. Perhaps its most distinctive feature is the large use

its author makes of the leading Rabbinical commentators. Dr. Phillips is well known as a Syriac scholar, and has naturally directed a good deal of attention to the later Jewish writings. His copious citations from these writings will be acceptable to many students. And the devout and candid spirit which pervades the *Commentary* is very commendable. Dr. Phillips never forgets that he is handling a portion of the Divine Word, and he never fails, however strong his own convictions, to treat with respect the convictions of others.

DUNCAN H. WEIR.

Bibliotheca Novi Testamenti Graecol. E. Reuss.

UNDER the above title, Professor Reuss, of Strassburg, expands into a volume the careful and independent section of his *History of the New Testament* devoted to the printed text. By noting the variations in 1000 selected places, he has explored the sources of the text in all the editions (nearly 600) to which he has had access. The chief fact established for the first two centuries after 1516 is the great variety of texts current, while on the other hand they are seen to be made up of combinations of readings derived almost wholly from four sources—Erasmus, the Complutensian, Estienne, and Beza: to the last-named editor the ill-gotten fame of the Elzevirs is restored. The history professedly deals exclusively with entire texts: on the discovery and publication of documents it touches only incidentally; on the criticism which leads from documents to texts scarcely at all. Hence, with all his cordial appreciation, the author can hardly give its due prominence to the special work of the seventeenth century, the accumulation and at last the study of materials chiefly by the scholars of England, Ussher, Walton, Gregory, Fell, and Mill. But he calls attention to two forgotten English editions, those of Wells (1709-19) and Mace (1729), as being the first (except Toinard's Latinising text) to introduce a mass of new readings from good MSS. As the sources used come to be documents instead of printed editions, genealogical classification breaks down. Modestly disclaiming criticism, Reuss is left without any better measure of progress than agreement with the latest critical texts, a rude standard at best, which becomes more and more misleading. Accordingly what ought to be the really important part of the history, from Bengel and Griesbach onward, leaves no distinct impression; and the incidental critical remarks are with the best intentions as loose as if Bentley, Griesbach, and Lachmann had never written. An English journal ought perhaps to notice the omission of Dr. Scrivener's reprints, in which the variations of the three latest editors is marked by difference of type; and the failure (p. 271) to seek access to Dr. Tregelles' elaborate edition, though it has been coming out at intervals for fifteen years. A writer so generous and impartial will thank us for suggesting that he might often enrich his pages from the special treatises of both these scholars. His own work, it will be seen, is disabled by its defective plan from affording the instruction which students most need; but it is full of interesting facts, obtained by a vast expenditure of labour.

F. J. A. HORT.

Intelligence.

Mr. P. E. Pusey is actively engaged on his new critical edition of *St. Cyril of Alexandria*. It is offered at the subscription price of 12s. per volume. The first three volumes can be delivered at once; vol. iv. in July, vol. v. in January, and vol. vi. in June, 1874. The subscription for 1872 should be sent to Messrs. Parker with that for 1873 by those who desire the first two volumes as well as those for 1873. We trust such an indefatigable worker as Mr. Pusey may some day be induced to take in hand a really critical edition of the Peshito version.

What is the characteristic of "modern" or independent theology? This question is answered in a clear and precise manner by Professor

van Bell in his inaugural lecture at Groningen, the head-quarters of the moderate orthodox school in Holland. The characteristic of the theology he professes to teach is its connection with the anthropological researches of the day. This feature does not exclude metaphysics from theology, but requires that the laws governing the phenomena of the religious life should be ascertained scientifically before examining into their permanence and foundation in human nature. The result is an anthropological in contradistinction to a speculative idealism.

We referred in our last number to Mr. Russell Martineau's acute suggestion as to the authorship of Gen. ii. 1-3. It is curious to see how nearly he anticipated it, on grounds of a necessarily subjective character, in his former papers on the narratives of the Creation in the *Theological Review*, vol. v., where he concludes in favour of 600 or 650 B.C. as the date of the first cosmogony (in its present form?). He also analyses Gen. i. into two separate narratives, though he does not distinctly say which is due to the Elohist, nor is it easy to see why the second of the two writers concerned should be supposed to have done more than bring the original eight acts of creation into a framework of six days, which of course involved a certain amount of interference with the text. (See *Schrader*, as before quoted.) Why should not this second writer be the Deuteronomist, whom Mr. R. Martineau has so well shown to be the author of Gen. ii. 1-3?

Tradition principally with reference to Mythology and the Law of Nations (Burns, Oates, and Co.) is the title of a work by Lord Arundell of Wardour. Its main position is the well-known but exploded position of Bryant, "that the heroes of mythological legend embody the reminiscences of the characters and incidents of the Biblical narrative," connected with which is the doctrine, defended at length against Sir H. Maine, that the maxims of the law of nations are based on a primitive tradition. The author aspires to a measure of scientific accuracy, and is scrupulously exact in his quotations and references. Unfortunately he is not always acquainted with the best authorities; thus, for Manu and the Deluge he goes to a French translation of the story in the *Matsya Purana*. He mentions the remarkable ceremony in commemoration of the deluge found by the late Mr. Catlin among the Mandan Indians, but takes no notice of the important chapter on the deluge-stories in Dr. Brinton's *Myths of the New World*. But what can be expected of a writer who is ignorant of the very language in which the best works on his subject are written?

Contents of the Journals.

Monatsschrift für Geschichte und Wissenschaft des Judenthums. (Biblical articles.) December.—The so-called Little Hermon or the G'ebel ed-Duhy. [Duhy is identified with the hill of Moreh (Judges vii. 1; cf. verse 22). The well of Charod is the modern 'Ain Djahid, Cheth being often confounded by the Arabs with Djim, and Resh with Lam.]—Studies on the LXX. and Peshito versions of Jeremiah; by P. F. Frankl. [Concluded.]—January.—The LXX. Codex of Ufilas; by A. Kisch. [The first discovery of fragments of the Old Testament of Ufilas was made in 1817 at Milan by Mai. In the Book of Ezra, which Dr. Kisch examines, the text differs essentially from that of both the versions given in the LXX., and in some parts adheres more closely to the Masoretic text.]

Jahrbücher für deutsche Theologie, Vol. XVII. No. 4.—The mediatorial work according to the scheme of the Munus Triplex; a contribution to the history of dogmatics; by A. Krauss.—Schleiermacher's theological doctrine of God examined in its relation to his philosophical doctrines and estimated according to its scientific value; by W. Bender.—Notices of books:—Orelli's *Hebrew Synonyms of Time and Eternity* (Diestel).—Meyer's and Eadie's *Commentaries on Galatians* (Schmoller). [Gives high praise to Dr. Eadie's work, especially for its philological accuracy.]—Meyer on Corinthians, and Hausrath's *Vier-Capitel-Brief an die Corinthier* (Schulze). [Unfavourable to Hausrath's hypothesis, as unnecessary and based on a wrong view of the facts; cf. *Academy*, vol. ii. p. 37.]—Holtzmann's *Criticism of the Epistles to the Ephesians and Colossians* (Weiss). [Rejects the author's conclusions, but does justice to the thoroughness of his critical apparatus.]—Eitel's *Lectures on Buddhism* (Grill). [An attractive summary of facts. But several of the most striking parallels between the narratives of the life of Buddha and of Christ occur in writings of the pre-Christian period: this has not been observed by the author.]

Zeitschrift für wissenschaftliche Theologie, Vol. XVI. No. 1.—The Epistle of James examined by A. Hilgenfeld.—On Phil. ii. 6-11; by W. Grimm.—Researches on the Epistle to the Philippians; by E. Hinsch.—Luke and Josephus; by H. Holtzmann. [The writer abandons his former view that Luke may have composed not only the *Aggeis* passages, but the whole book of the Acts. He now thinks that the notes of time point us to the first decennia of the second century. The wider historical framework of the book is now shown to be derived from Josephus.]—Belthis again; by H. Ilitzig. [Answer to Geiger.]

—Nathanael; by O. L. ["Nathanael is the apostle Paul!"]—John in Asia Minor; by A. Hilgenfeld.—Among the notices of books, see especially that of Wellhausen on the text of Samuel, by Nöldeke; of Lagarde's *Genesis Graeca*, by Rönisch; and of Heinze's *The Doctrine of the Logos*, by A. H.

New Publications.

BELL, F. W. B. van. *Het Karakter der orathankelijke Theologie*. Groningen: Noordhoff.
COLENSO, J. W. *The New Bible Commentary Critically Examined*. Part IV. Book of Numbers. Longmans.
KEIM, T. *Geschichte Jesu nach den Ergebnissen heutiger Wissenschaft übersichtlich erzählt*. 3. Bearbeitung. Zürich: Orell, Füssli und Co.
REIFFERSCHIED, A. *Bibliotheca Patrum Latinorum Italica*. 2. Band, 3. Heft. [Academy Reprint.] Wien: Gerold's Sohn in Comm.
ZAHN, D. A. *De Notione Peccati, quam Johannes in Prima Epistola docet*, Commentatio. Halle: Mühlmann.

Physical Science.

Carus' *History of Zoology*. [*Geschichte der Zoologie bis auf Johannes Müller und Charles Darwin*. Von J. Victor Carus.] München: Oldenbourg, 1872.

Of all sciences, that which deals with the phenomena of life, and is at present assuming definite shape and purpose, affords the most promising material for historical treatment. The growth of biological theory, never wholly emancipated from the trammels of superstition, from time to time receiving new determining impulses from the progress of other sciences, from the widening of men's field of vision by the discovery of new lands and new means of observation, and from the diffusion of broader views of the nature of things, has culminated in the development of a doctrine which in turn acts as a powerful source of advance on all departments of knowledge. The identification of the forces manifested in living things with the general forces of the universe, by Darwin's theory of survival of the fittest, constitutes the last great step in human knowledge: to trace, therefore, the history of that step in a complete manner, and fully to estimate the significance of its antecedents, is to point out how, when, and where all the various streams of mental activity have contributed to an epoch-making result. Such a history may well be valuable, not only as a contribution to psychology, but as a guide to the future efforts of zoologists and botanists.

Those who are acquainted with the bibliographical and educational works for which his fellow-naturalists are so greatly indebted to Dr. Carus will expect to find in a history of zoology written by him a laborious and judiciously arranged treatise. This bulky volume, one of the Munich series of histories of science in Germany, but by no means limited in its scope to that country, commences with the zoological conceptions of primæval times, and cannot disappoint any student who desires a careful exposition of the condition of knowledge of animal forms during successive centuries.

Dr. Carus divides the history of zoology into three great periods—the ancient, the mediæval, and the modern. The notice of the ancient period, after a short sketch of zoological knowledge in the "Urzeit," passes to the writings of the Greeks and Romans, where, of course, Aristotle stands almost alone. His knowledge of animal forms and of animal structure is methodically placed before the reader, whilst to Pliny an altogether unimportant position is justly assigned. The relation of the science of classical times to the culture of succeeding ages is discussed at some length. The decline of ancient science may be compared to the overwhelming of

an edifice by the ashes and lava-streams of a season of volcanic eruption and violence. The middle ages enveloped these ruins with mystery and contemplated them with reverence: the modern epoch has proceeded to rear new structures on these foundations. Physical enquiry in the dark ages was checked by the development of astrology and sorcery, things foreign to the hitherto dominant Greek cast of thought, whereby nature became strange and uncanny in the eyes of men—whilst further the spread of Christianity and the persecution of Christians caused a revulsion from the heathens and their philosophy. Coming to the middle ages, the stock of zoological knowledge is found to be almost wholly comprised in the popular treatise known as the *Physiologus*—of which and its successive editions, existing in almost all the languages of Christendom, and extending from the fourth to the fourteenth century, Dr. Carus gives a lengthy account. The zoological knowledge of the Arabs like that of the *Physiologus* appears to have been very inconsiderable. In the thirteenth century, the commencement of a literary activity, the revival of Aristotle, and the travels of Marco Polo are pointed out as new factors in the progress of zoology. The foundation of universities in the fourteenth century and the printing of books in the fifteenth prepare the way for the zoology of modern times, the history of which Dr. Carus dates from the first work on systematic zoology, that of Edward Wotton, of Oxford, published in 1551. The modern period is divided by the author into three minor periods—namely, the period of encyclopaedic treatment, the period of systematism, the period of morphology. We cannot but regret that it has been found necessary to give less than two-thirds of the volume to this modern period, in which the actual development of zoology has taken place; and still more are we disposed to lament that Dr. Carus should be so obviously pressed for space in his treatment of by far the most important part of this epoch, that which he terms the period of morphology. Between a fourth and fifth only of the whole book is given to this phase of the development of zoology, so brief in years, but so rich in great names and varied fruit-bearing conceptions. In the account of the encyclopaedic period we find notices of such general treatises as those of Wotton, Aldrovandi, and Gesner, and the influence of the anatomists Coiter, Fabricius, Severinus, Willis, and Harvey. The middle of the seventeenth century marks the commencement of the era of systematists, and is characterized by the introduction of the microscope into zoological research by Malpighi, Leuwenhoek, Swammerdam, and Redi, as well as by the foundation of academies of learning—the Royal Society, the *Naturae Curiosorum*, the French and Italian academies—and of public museums and gardens for the preservation of live specimens. The systematic work of Linné, led up to by the attempts of Charleton, Ray, and Klein, is the culminating point of this period of the growth of zoological science. At the same time, amongst other figures of importance whose work and influence are recorded, stand forth the first naturalist-traveller, Pallas; the first experimental physiologist, Haller; together with Spallanzani, Caspar Wolff, John Hunter, and Viq d'Azyr.

The final sub-period of the modern growth of zoology, in which it is apparently the opinion of Dr. Carus that we are still living—that of morphology—is most justly introduced with a sketch of the “*Naturphilosophie*” of Schelling, Oken, and Goethe. The doctrine of types in its various forms as associated with the names of Lamarck, Cuvier, Blainville, St.-Hilaire, von Baer, is given in only too brief a space. Pander, Baer, Rathke, and embryology; Schwann, and the cell-theory; the morphological doctrines of Müller and Owen; palaeontology; the influence of special exploring expeditions, travels, and the knowledge of faunas; the investigations of

particular groups by later zoologists—form a series of short chapters remarkable for accuracy of statement and, on the whole, just ascription of discoveries to their rightful authors. But a zoologist who reads this book will inevitably wish that Dr. Carus had given a shorter account of the *Physiologus*, and a longer one of the lives and works of the great students of animal structure; and when he comes to find the theory of the development of the animal world—identified as it is with the names of Lamarck, St.-Hilaire, and Darwin—finished off in seven pages, he will be tempted to wish that so competent an author as Dr. Carus had omitted the *Physiologus* and some of its compeers altogether.

We are not disposed to admit the wisdom of this desire, for the work as it stands is a very valuable one. Future historians of zoology will find in it a mass of material and references, and may feel themselves at liberty to pass lightly over those periods of childish extravagance, of little or no moment to the development of the science, which Dr. Carus has so carefully illustrated.

It would be wrong not to say that, in spite of the excellent introductory and valedictory chapters in connection with each section of the *History*, there is a want of perspective and proportion in the treatment of doctrines and persons which cannot be ascribed to the possibly accidental hypertrophy of the first part of the book. The explanation seems to lie not in a deficiency on the part of the author, but in the judgment of those who have drawn up the scheme of histories of science, of which series Dr. Carus' book is one.

In setting about to trace a history, it is desirable not to limit the subject of it too closely, otherwise by stringent exclusion of what seems, in the light of the initial limitation, to be foreign matter, the varied sources of true history may be lost or but partially appreciated. Physiology, botany, and zoology have been separated in the Munich scheme as three distinct subjects, the history of each of which is to be traced. No doubt valuable material will be brought together in each case, but the history of a great science will still remain to be written of which these three subjects give but a rough and ready analysis, not a logical division; that science or branch of science is biology, and its scope the reference of the phenomena of life to the general laws of matter. Had the limitations of the scheme permitted, whilst such a series of zoologists as Linné, Cuvier, Müller, and Darwin was selected as a framework, it would have been possible to illustrate in their successive grasps at the final doctrine of biology the influence of the great antecedent or contemporary physiologists, botanists, and geologists. This would have given the vast array of names necessarily cited some order more significant than a chronological one, whilst the relative size of men like Harvey, Malpighi, von Baer, Schwann, and the four named above, could have been more adequately rendered.

E. RAY LANKESTER.

Notes of Scientific Work.

Botany.

Beccari's Expedition to New Guinea.—Two letters from Beccari are reproduced in the *Nuovo Giorn. Bot. Ital.* (1872, pp. 291-294). In the latest, dated Sorong, June 21, he speaks of having already collected about 500 species of flowering plants, but that the New Guinea flora is not half as rich as that of Borneo. This is a disillusion to him; on the other hand, he finds that all the north-east coasts are accessible, and that he can penetrate some distance into the interior.

Effect of Manures on the Production of Alkaloids in Cinchonas.—Mr. Broughton has given in a government paper, which is quoted in the *Pharmaceutical Journal*, January 4, p. 521, the results of the application of manures to cultivated cinchonas. The experiments were made at the Ootacamund plantations on *C. succumbra* and *C. offi-*

cinalis. The manures used were ammonium sulphate, Peruvian guano, and stable manure. No greater luxuriance was noticed in the growth of manured trees than in those not so treated, but in every case there was an increase in the alkaloids of the bark. The greatest increase was with *C. officinalis* treated with stable manure; the result was most remarkable:—

	Manured.	Unmanured.
Total alkaloids	7.49	4.68
Quinine	7.15	2.40
Cinchonidine and cinchonine	0.34	2.28

The quinine is nearly trebled, partly at the expense of the other alkaloids.

Amyloid Corpuscles in the Fovilla of Pollen.—Saccardo has described (*Nuovo Giorn. Bot. ital.* 1872, pp. 241–243) the amyloid particles existing in the fovilla of the pollen of numerous plants belonging to very different natural families, and which are probably of general occurrence. They vary in diameter from $\frac{1}{1000}$ to $\frac{1}{500}$ of a millimetre. Their usual shape is circular passing to elliptical; in *Oenothera* they are fusiform. Treatment with iodine colours their nuclear portion violet.

The Synonymy of Brazilian Ferns.—In a paper read before the Linnean Society, on January 16, Mr. J. G. Barker criticized an elaborate monograph, published by Fée, containing descriptions and figures of nearly two hundred new species. Of these Mr. Barker was not prepared to admit more than 10 per cent. as really valid. The remainder he considered to consist of old well-known species which had not been recognised, or of mere individual forms not possessing real specific value.

Welwitschia.—Professor M'Nab points out in *Nature* (January 16, p. 202) that, in the appendix to his paper read before the Linnean Society, he expressed his belief, after examining Strasburger's figures of *Ephedra*, that that author is right in regarding the outer parts of the female flower of *Welwitschia* as carpellary. In the paper itself Professor M'Nab had described the outer parts as forming a perianth, a view he now abandons. To this extent the notes in the *Academy* (vol. iv. pp. 13 and 31) require correction.

Geology.

Coccoliths and Rhabdoliths.—Mr. O. Schmidt has for some time past been engaged in deep-sea dredging in the Adriatic between the Apulian and the Dalmatian coasts, the greatest depth reached being 630 fathoms. At depths exceeding 50 fathoms the sea-bottom has been found to be covered with Bathybian mud, which at greater depths contains Foraminifers (*Globigerina*, *Orbulina*, *Uvigerina*, *Rotalia*, *Textularia*), as well as the peculiar flat-shaped calcareous bodies which have been called Coccoliths. Associated with them are numerous other long bodies, until now unknown, which the author has named Rhabdoliths. Mr. Schmidt is of opinion that they do not form part of the Bathybiae, but are independent organisms, which live as parasites, as it were, in the Bathybian mud, like the above-mentioned Foraminifers. It is interesting to learn that the greater depths of the Adriatic, at least in this more southern part, are extremely poor in animal life, and that higher organized forms, like Echinoderms and Molluscs, are entirely absent. The author attributes this remarkable fact to the absence of currents at those depths. Similar observations were made by Mr. Forbes in the Aegean Sea, and by Mr. G. Jeffreys in the western part of the Mediterranean. (*Sitzungsberichte der Akademie der Wissenschaften*, Vienna, 1872, p. 669.)

The Post-Tertiaries of the Sahara Desert.—M. C. Grad, who has spent considerable time in scientific researches in North Africa, especially in the Atlas and the Sahara, gives in the *Archives des Sciences de la Bibl. univ. Genève* of 1872 a statement of his results, which differ widely from the teachings of the supporters of the glacial theory. The author found that the Quaternary deposits, which are composed of conglomerates, sandstones, and marls yielding gypsum, and which attain great thickness at the base of the Atlas, everywhere yield only land- and freshwater-shells, as well as *Cardium edule*, which up to the present time lives in the salt-marshes of the Sahara; that genuine marine shells are never met with in these deposits; and that consequently the Sahara could not have been covered by the sea during the Diluvial epoch. The occurrence of *Buccinum gibberulum* and *Balanus miser*, as recorded by Desor, have reference to a single imperfect specimen, which until now remained unique. Moreover, the author could discover no traces of ancient glaciers in the Atlas range, and he believes that all the statements respecting the existence of moraines and ice-marks are erroneous.

Geological Notes on Central South Africa.—Adolf Hübner, who travelled in South Africa in 1869 and 1870, gives in *Petermann's Mittheilungen*, vol. xviii. p. 422, a sketch of the geology of the country between Pötschfroom and Inyati. Round a granitic nucleus is ranged a belt of metamorphic rocks, that are much intersected by

greenstones; older sedimentary rocks are found on the southern and northern (20° S. lat.) side of this crystalline nucleus. The granite, which nearly everywhere shows the normal composition, is very poor in useful minerals. At one point only, on the Mangwe river, did he find red copper ore. The metamorphic rocks, gneiss, granulite, hornblende rock, iron mica schists, clay slate, chloritic schists, and crystalline limestone, contain no useful ores; true mica schists were not observed. The greenstones consist of a dense mixture of oligoclase and amphibole, and Hübner failed to detect any useful minerals associated near them. The sedimentary rocks, which occur at a few places, consist of beds of plant-bearing sandstones, belonging to the Karoo formation. The gold-fields on the Tati river, a tributary of the Shasha, which flows into the Limpopo, were also visited. They are situated in metamorphic rock, consisting chiefly of chloritic schists, which contain gold-bearing quartz reefs. The present yield is so small, and the necessary expenses so great, that Hübner does not expect them to prove lucrative.

The Diamond Fields of South Africa.—Dr. E. Cohen, of Heidelberg, in a letter to Professor Leonhard, published in the *Jahrbuch für Mineralogie*, part viii. 1872, p. 857, gives a short résumé of his observations in the diamond-bearing districts of Griqualand West. The diamond-bearing material is chiefly found in round- or oval-shaped isolated basins, which are formed by "riffs" and walls of other rocks, principally greenstones and sedimentary rocks; the latter of which is generally much disturbed and inclined. The greenstone, the "iron-stone" of the diggers, is most like olivine gabbro. The walls or "riffs" of these basins vary in their geological structure, and this is one reason why Dr. Cohen considers the diamond-bearing strata independent of the "riffs." The basins are filled with a greyish-green or greyish-yellow tufa-like mass, which encloses various other rocks, such as sandy shales, sandstones, and boulders of greenstone. None of the materials have apparently been rolled by water, and there is no indication of water having been an agent in the accumulation of the contents of these basins. In addition to the above rocks, associated with the diamond-bearing material, were observed granite and hornblende rocks, and among minerals large quantities of mica, garnet, and ilmenite, and, less abundantly, olivine, augite, and hornblende, and, probably, topaz. In Jägersfontein, Dr. Cohen discovered sapphire and gold in a fragment of granitic rock. Very remarkable are the so-called "floating riffs," which are large pieces of loose rock, surrounded by diamond-bearing tufa. The latter material is occasionally covered with porous or white chalk-like recent limestone, which not unfrequently fills up the deep fissures in the ground, caused by excessive drought; the author considers that this deposit is in no way connected with the occurrence of the diamonds, as Mr. E. T. Dunn, the state geologist of the Cape, appears to believe. Dr. Cohen is of opinion that these diamond localities represent the centres of eruptions of tufa, by which means a large share of the material of older crystalline rocks, containing the diamonds and most of the associated minerals, has been thrown up from below the surface. The diamonds were partly preserved, partly broken into fragments, which, together with the tufa, were deposited at places often widely distant. The diamond-bearing material undoubtedly more nearly resembles a tufa than a sedimentary deposit. In some instances walls or "riffs" of the basins have been destroyed, and their contents carried away by water, to be deposited in the alluvial of rivers, as is the case at the Vaal river and other places.

A short time ago a beautiful specimen of a pterodactyl was found in a quarry at Eichstädt, which shows the membrane of the wing in a perfect state of preservation. The membrane of the wing is smooth, without feathers or hairs, and is traversed by several extremely faint lines; one finger of the wing is 40 cm., the other 11 cm. in length, the membrane itself 4 cm. broad. The specimen is at present in the possession of Mr. M. Krauss, of Eichstädt, and is for sale. (*Jahrbuch für Mineralogie*, part viii. 1872, p. 861.)

Physiology.

The Regulation of Animal Heat in Warm-blooded Animals.—As all animals generate heat and give off heat, the question arises, Is a constant equilibrium established between this production and loss? Such an equilibrium is generally admitted to exist for the higher animals; hence their name of animals having a constant temperature, and physiological experiment has shown this to be true, i.e. that within certain limits the temperature is maintained independently of that of the surrounding medium, or, in other words, an animal regulates its heat. As regards the nature of this regulation, authors differ, some considering that animals regulate the loss of heat, others that they regulate its generation. The question has recently been discussed by Rosenthal in an inaugural dissertation, an abstract of which is given in the *Revue scientifique*, ii. 2, p. 591. His experiments have chiefly had for their object the effects of exposure of animals to a high temperature. He finds that at temperatures between 11° and 32° Cent. rabbits vary but little in their temperature between 26° and 32°; exposed to a tem-

perature of 32° to 36° , their temperature rises to 41° – 42° , while the respirations are hurried, and the pulse becomes frequent. Exposed to a temperature of 36° – 40° , the temperature of the animal rises to 44° – 45° , the above symptoms become still more marked, the pupil dilates, and death soon follows. In all cases the temperature of the animal is above that of the surrounding medium; it therefore constantly loses heat. If, however, the quantity of heat produced be constant, in proportion as the surrounding temperature rises, the difference between this and that of the animal diminishes, and the loss of heat on the part of the animal, which is determined by this difference, ought to diminish also. The temperature of the animal ought consequently to rise, and in fact it does rise, though in less proportion. A regulatory apparatus now comes into operation, that may either act in diminishing the generation of heat, which has not been demonstrated, or in increasing the loss of heat, which is what actually occurs. The cutaneous vessels are dilated, the periphery of the body receives a larger amount of blood, which, being warmer than the surrounding medium, becomes cooled. At the same time evaporation of aqueous vapour becomes more rapid, and this also causes considerable loss of heat. The action of the nervous system in this regulatory process is not quite satisfactorily established, but the author is of opinion that it is certainly due to its vaso-motor power.

The Number of the Red Blood Corpuscles in Mammals, Birds, and Fishes.—M. Malassiz (*Comptes rendus*, 75, p. 1528) describes a method by which the red as well as the white corpuscles can be readily counted. According to the method recommended by M. Potam, a drop of blood is mixed with some preservative liquid and introduced into an artificial capillary, which consists of a flattened glass tube, in which the volume is calculated for each unit of length. By means of a microscope, the eye-piece of which is divided into squares, the number of corpuscles comprised within a certain number of squares can be counted. Knowing the length of tube corresponding to the squares and the corresponding volume, the number of corpuscles in the cubic millimetre can be easily calculated. In Mammals, the number varies from 3,500,000 to 18,000,000 in the cubic millimetre. The average number in man is 4,000,000; in the camel, from 10,000,000 to 10,400,000; in the goat, 18,000,000; and in the porpoise, 3,600,000, a number exceeding that found in Fishes. Birds have fewer than Mammals: the maximum is 4,000,000, the minimum 1,600,000; the mean being about 3,000,000. In Fishes they are still less numerous, and there is a difference between osseous and cartilaginous fishes: osseous fishes having 700,000 to 2,000,000, cartilaginous fishes from 140,000 to 230,000. Thus the number of corpuscles diminishes as we descend the animal series. But the richness of the blood depends not alone on the number, but also on the surface, volume, and weight of the globules in the cubic millimetre, as well as on the amount of haemoglobin in each corpuscle. The author has not been able to solve these questions, but compares the number of the corpuscles with their dimensions. The corpuscles increase in size as we descend the animal scale, so that there is an inverse proportion between the size and the number of the corpuscles. This proportion, however, is not altogether constant, for man has fewer corpuscles than the dromedary or llama, and at the same time smaller ones. A consequence of this inverse proportion is that the diminution in number is compensated by an increase in volume. This, however, is not invariably the case, for Birds gain more by the augmentation in volume than they lose by the diminution in number, the weight of a bird's being greater than that of a mammalian corpuscle.

Influence of the Nervous System on the Movements of the Oesophagus and Stomach.—Professor Goltz, of Strassburg, has published, in *Pflüger's Archiv*, vol. vi. pt. xi., the following results of a recent investigation:—1. After destruction or ablation of the brain and spinal cord the oesophagus becomes persistently contracted, and the stomach exhibits lively movements. 2. Section of both vagi also induces persistent contraction of the oesophagus and continuous movements of the stomach. 3. Contraction of the oesophagus and movements of the stomach occur reflectorily through the medulla oblongata as a centre when the external skin or the abdominal viscera are violently irritated.

Action of Nicotin on the Intestinal Movements.—Dr. S. Basch and Dr. L. Oser contribute an interesting essay on the action of nicotin to the last part (Heft iv.) of *Stricker's Medicinische Jahrbücher* for 1872, especially in regard to its action on the movements of the intestine. They find as the natural result of their enquiries that—1. The first transient peristaltic movement coincides with the first retardation of the pulse and the first reduction of the blood pressure, and consequently occurs in Traube's first stage. 2. The tetanic contraction and the pallor of the intestine begin with the augmentation of the pressure, and continue about as long as the latter lasts. The frequency of the pulse is in the first instance lowered, but subsequently rises. Thus the tetanus of the intestine occurs in Traube's second stage. 3. Coincidentally with the reduction of the blood pressure and augmentation of the frequency of the pulse, the contraction of the intestine ceases, it becomes perfectly quiescent, and then, in consequence of renewed vascular injection, begins to be redder.

The period of rest of the intestine is thus seen to occur at the commencement of the third stage of Traube. 4. The second series of peristaltic movements takes place while the pulse-frequency diminishes for the second time, and the blood pressure gradually falls, and thus occurs at the end of Traube's third stage. 5. The second peristaltic movements appear during the period when the pulse diminishes in frequency for the second time, and the blood pressure gradually falls, and consequently show themselves at the end of Traube's third stage. It appears, then, that both the first and second period of peristaltic movements are coincident with excitation of the vagus, that is, with the first and second retardation of the pulse, and that, as the blood pressure is always below the normal at this time, and the vessels are also dilated, the intestine is abundantly supplied with blood during the two periods of peristaltic movement. This is in opposition to the view propounded by Schiff and Nasse that anaemia causes peristaltic movements. Rest of the intestines is associated with lowered excitability of the vagus and of the vaso-motor structures (exalted frequency of the pulse, lowered blood pressure, and vascular injection).

Structure of Muscular Fibre.—A paper on this subject appears in the *Medicinisches Centralblatt* for December 28, 1872, by M. E. Grunmach, whose researches have chiefly been made upon Insects. He places the muscles to be examined in white of egg, and in this menstruum is able to observe spontaneous contraction of the fibres which do not take place in a solution containing 0.75 per cent. of common salt. On tetanising a fasciculus with magneto-electrical shocks, a very slow contraction occurs; the extent of shortening amounting to one half the original length of the bundle. M. Grunmach maintains, in opposition to Kühne, that a sarcolemma is present in the primary fasciculi (fibres) of the muscles of Insects: at least, he ascertained its existence without doubt in the muscles of the blowfly. He gives the following general results of his examinations:—1. The structural element of transversely striated muscular fibre is the "muscle-column" (*Muskelsäulchen*), or *columna muscularis* of Kölliker. 2. The *columna muscularis* is composed of a clearly, highly refractive matrix, in which, at definite distances from each other, lie dull prismatic bodies (sarcous elements), which are either all of equal size or are alternately broad and slender. 3. The *columnae muscularis* are separated from one another by an "interfibrillar" or "intercolumnar" substance, in which, besides fat drops, other granular particles are suspended. 4. A certain number of muscular columns form a primitive muscle-fasciculus, which is surrounded by a sarcolemma. 5. The prismatic bodies appear to be doubly refractive in polarized light, whilst the matrix is singly refractive. 6. The so-called yellow muscles of Insects are to be included amongst the transversely striated muscles. 7. The essential difference between the so-called yellow muscles of Insects and other muscles consists in the circumstance that in the former the conception of the *columna muscularis* and the fibrils are identical.

Haematozoon in Man.—Dr. T. R. Lewis, attached on special duty to the Sanitary Commissioner with the Government of India, has just published a pamphlet in Calcutta on a kind of Filaria—the *Filaria sanguinis hominis*—which he found in the blood of man. He states that in July 1872, whilst examining the blood of a native suffering from diarrhoea, he observed nine minute nematoid worms in a state of great activity, on a single slide. His colleague, Dr. Douglas Cunningham, fully coincided with him in the opinion that they were precisely the same kind as those observed by Dr. Lewis two years ago as being constantly present in chylous urine. He gives woodcuts of the Haematozoon, from which they appear to be long, worm-like animals, either presenting a granular aspect throughout, or having a hyaline membrane projecting beyond the head extremity; and a ribbon-like tail. So numerous were they that several were observed in a small drop of blood obtained from the tip of the finger by a prick with a needle. Their average diameter is about that of a red blood corpuscle, and the length forty-six times the greatest width, or about 1.75th of an inch. They appear to be constantly associated with chylous urine.

New Publications.

- ANNUAIRE de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique. Bruxelles: Hayez.
- BEHRMANN, C. Lehrbuch der Nautik und ihrer mathematischen Hilfswissenschaften. Leipzig: Teubner.
- BOUCHARDAT, G. Histoire générale des Matières albuminoïdes. Paris: Baillière.
- DE CANDOLLE, A. Histoire des Sciences et des Savants depuis deux Siècles. Genève: Georg.
- DÖLSCH, G. Ueber die hyperbolischen Functionen und deren Beziehungen zu den Kreisfunctionen. Nürnberg: Ebner.
- DUFTSCHMID, J. Die Flora von Oberösterreich. 1. Band, 2. Heft. Linz: Ebenhöch.

- DUMAS, M. *Éloge historique d'Isidore Geoffroy Saint-Hilaire*. Paris : Didot.
- DUVAL, M. *Structure et Usages de la Rétine*. Paris : Baillière.
- EBERMAYER, E. *Die physikalischen Einwirkungen des Waldes auf Luft und Boden und seine klimatologischen und hygienischen Bedeutungen. Resultate der fürstlichen Versuchs-Stationen im Königreich Bayern. 1. Band. Aschaffenburg : Krebs.*
- ECKHARD, C. *Beiträge zur Anatomie und Physiologie*. Glessen : Roth.
- EICHWALD, E. *Beiträge zur Chemie der gewebbildenden Substanzen und ihrer Abkömmlinge*. Berlin : Hirschwald.
- FARABEUF, L. H. *De l'Épiderme et des Épithéliums*. Paris : Masson.
- GRUENHAGEN, A. *Die electromotorischen Wirkungen lebender Gewebe*. Berlin : Müller.
- GUILLEMIN, A. *Éléments de Cosmographie*. Paris : Hachette.
- HENRIVAUX, J. *Remarques sur la Vitrification*. Paris : Masson.
- LAGNEAU, G. *De l'Influence des Professions sur l'Accroissement de la Population*. Paris : Martinet.
- MARTINS, C. *Une Station géodésique au sommet du Canigon dans les Pyrénées-Orientales*. Paris : Claye.
- MARTY, G. *Contribution à l'Étude de l'Alcoolisme*. Paris : Delahaye.
- NAUMANN, A. *Jahresbericht über die Fortschritte der Chemie und verwandter Theile anderer Wissenschaften für 1870. 2. Heft*. Giessen : Ricker.
- NEUMANN, C. *Theorie der electrischen Kräfte*. Leipzig : Teubner.
- PETTENKOFER, M. v. *Ueber den gegenwärtigen Stand der Cholera-Frage und über die nächsten Aufgaben zur weitem Ergründung ihrer Ursachen*. München : Oldenbourg.
- PREYER, W. *Ueber die Erforschung des Lebens*. Jena : Dufft.
- SIEBOLD, C. T. v. *Mittheilungen über die Speichelorgane der Biene*. Nördlingen : Beck.
- SZARANIEWICZ, J. *Kritische Blicke in die Geschichte der Karpathen-Völker im Alterthum und im Mittelalter*. Lemberg : Wild.
- TUSCA, M. *Étude sur la Torsion*. Paris : Lacroix.

History.

The History of India as told by its own Historians. The Muhammadan Period. The Posthumous Papers of the late Sir H. M. Elliot, K.C.B. Edited and continued by Prof. J. Dowson, M.R.A.S. Vol. IV. Trübner and Co., 1872.

HAVING in these pages repeatedly enlarged on Sir H. Elliot's great undertaking, and on the manner in which it is carried out by the editor and co-author, Professor Dowson, we resign ourselves simply to advert to the most noticeable literary facts brought forward by this new volume, which in every respect equals its predecessors.

That period in Indian history which is copiously illustrated by the contents of this volume extends over 167 years, *i. e.* from A.D. 1389 to 1556, comprising the decline and last struggles of the Tughlak dynasty, the inroads of Timur and his devastation of Delhi, the dictatorship of several grandees (such as Ikbál Khán and Daulat Khán) over more or less of the ruins of the empire, the Afghán dynasty of the Lódís, the reigns of Bábar and Humáyún, and, lastly, the Afghán dynasty Súr, who held India under their sway during the time when Humáyún wandered as an exile in Afghánistan and Persia. By the accession of Akbar to the throne (1556) a new period in the history of India was inaugurated.

Among the thirteen chronicles described in this volume we notice particularly three, which were hitherto altogether unknown, the contents of which are communicated for the first time. One of them is the *Tarikh-i-Mubárah Sháhí*, by Yahyá ben Ahmad Sirhindí. He was contemporary with the Sayyids, and for their history his chronicle is the chief source. According to his own statement, he wrote for the

period from 1388 till the end of his book (1448), "upon trustworthy information and personal observation." It is dedicated to the second Sayyid, who, when prince royal, held Firospur and Sirhind, the home of the author, as fiefs from his father (p. 48). "Yahyá has no claims to be ranked as an historian, but he is a careful and apparently an honest chronicler." His work has largely been drawn upon by later historians for the history of the Sayyids.

Also the *Tarikh-i-Shér Sháhí*, by Abbás Khán Sarwání, is contemporary with the events it relates. It was a standard work on the history of the Súr dynasty, with the founder of which the author was connected by marriage. He wrote "probably not long after A.D. 1579" by order of the emperor Akbar. Unfortunately, of the three parts of the book, only the first one is extant, which contains a minute account of the origin and rise of Shér Sháh. In the other parts the author had narrated the fate of his successors till the restorations of Humáyún. Abbás Khán's work is valuable as a historical record, but of no great literary merit, and certainly to be used cautiously, as he does not seem to be free from partiality for his countrymen, the Afgháns.

The third chronicle, the *Tarikh-i-Dáúdí*, by Abdallah, is devoted to the history of the two Afghán dynasties Lódí and Súr. It has received its name from the last Afghán prince Dáúd-Sháh, who was beheaded under Akbar, A.D. 1575. Of the author nothing is known except this, that he must have written after the accession of Tehángír, that is, after A.D. 1605. The author is silent as to his sources; it is very likely that he lived contemporaneously with the greater part of the events which he records.

The other historical works are of less rare occurrence, and were known before, such as the autobiography of Bábar, &c. They have yielded much interesting matter regarding the same period as well as earlier times. The same is to be said of the appendix, in which poems of historical import by Unsuri and Salmán are communicated in translation.

If Professor Dowson, besides those of the Royal Asiatic Society and the India Office Library, had had, *e. g.*, the collections of the British Museum and the Bodleian Library at his disposal, he would have worked under much more favourable circumstances. On p. 557 he quotes a short note of Sir W. Ouseley's regarding a Persian manuscript, now in the Bodleian, which is so curious and valuable that the following description may not appear out of place. The MS., it seems, was copied for Jonathan Scott, A.D. 1782. Unfortunately it is not complete, but contains only certain, and in several places disconnected, portions of a much larger work. The author was a pupil of Biruni by the name of Abú-Saíd Abd-alhay ben Abd-alahhák b. Mahmúd Kardízi. He wrote A.D. 1049-50, during the reign of the Ghaznawí prince Abd-alrashíd, to whose name he always adds, "May God give long duration to his rule." The original seems to have contained three parts:—

1. A general history down to his time, special regard being had to the determination of the chronological dates. For the history of the Ghaznawí kings till Abd-alrashíd, it is a contemporaneous record.

2. On the festivals and festive days of different nations, with an account of their origin.

3. An essay on the history of civilisation of the then known nationalities. In the parts extant he treats at great length of the Hindus and of Northern nations, Turkish, Slavonian, and others. Even to the Hungarians (Almaj-gariyya) a chapter is devoted.

The whole, which probably bore the title of *Zain-alakhbár*, is worked out in the critical spirit of Biruni, whose works seem to have been the chief sources of Kardízi. It is of great literary interest in consequence of the tendencies

which it displays, and the plan upon which it is carried out, containing besides much useful information scarcely to be found anywhere else.

ED. SACHAU.

The Gallican Church. A History of the Church of France, from the Concordat of Bologna, A.D. 1516, to the Revolution. With an Introduction. By Rev. W. Henley Jervis, M.A., Prebendary of Heytesbury, Author of *The Student's History of France*. Two Volumes. Murray.

THIS book has two titles, of which one would be better away. On the cover it is called "Church of France;" at the head of the pages, "The Gallican Church," and on the title-page, both. Now, a "History of the Church of France," even within the chronological limits defined, it scarcely is: but it is a history of "The Gallican Church," if that name be understood to restrict the subject, not only to a history of the national Catholicism, but to a history of one special aspect of that religion.

A history of France would include the history of the Church of France; a real history of the Church of France would include a history of Gallicanism in this narrower sense—of the relations of the national Church with Rome and with the civil power. And it is possible to say that nothing less than a general history of the nation could show even this in its true significance: else we must be content if a departmental history be suggestive, without pretending to be exhaustive. And suggestive this book is: not the less so for the avowed personal opinions of the author, though these are of an order not very often combined with historical insight. He need not have argued so apologetically in his preface that "impartiality does not mean indifference." Surely nobody supposes that Gibbon's account of primitive Catholicism is "dispassionate." The question of Gallicanism is one that, to be treated seriously, requires the two postulates that Catholicism is valuable, and that it is open to dispute wherein lies the essence, or at least what are the conditions, of Catholicism. These assumptions harmonize with few minds better than with that of an Anglican of "reunionist" sympathies: and Mr. Jervis is singularly free from the incapacity to look at a question otherwise than in the light of his theory as to its solution. For an ideal Gallicanism—the principle of self-government of the national Church, opposed to absolutism either Erastian or ultramontane—he plainly enough avows his sympathy: but at the same time he confesses that in practice the fight has been between Pope and King, and that, so far as the religious conscience has been the arbiter, the Pope has won, and won because he deserved to win—because he, of the two, was the champion of religion.

Whether from an incapacity to theorise, or from a voluntary and probably judicious self-restraint, there are fewer opinions enunciated in this book than are suggested by its narrative; and in particular there is a studied avoidance of pressing tempting historical parallels, or of anything like "insularity" of treatment. Mr. Jervis is right in relegating to an appendix, as a mere episode, the negotiations between Dupin and Archbishop Wake: his sympathy with the object in view does not blind him to their impractical character. But more might have been said on the likeness, sometimes even verbal, of Gallican formulæ, like those in vol. i. pp. 259, 280, 306–9, to the English "Oath of Supremacy and Abjuration": the same disposition showing itself, on the royalist side, to avail itself of the "fallacy of many questions," and to lump together or confound the theories of the lawfulness of tyrannicide, the lawfulness of the deposition of a king by the national will, and the competence of the Pope to visit a sovereign personally with ecclesiastical censures. In fact, one is led by this book to think of the contrast between English and

French history, as less fundamental than Englishmen are pleased to assume. The general question on both sides of the Channel was the same—except in dates. There is the conflict between the royal supremacy and the papal, complicated by that between the King (often supported by the Pope) and the national liberties. But the exception made is the more important because not only were the absolute dates of each event different in the two countries, but the course of political and ecclesiastical history respectively was not parallel in time, nor were the relations of one to the other the same. In England, as in France, the sympathies of the national Church were on the absolutist side; but in England it was forced, in 1688, *τὸν δῆμον προσεταπεινῆσαι*, because the national element in the ecclesiastical controversy was more sharply defined than the theological, and was recognised to be of more importance; while in France the national question did not affect the nation, but only the crown and the superior clergy. Gallicanism and Jansenism (after the death of the great Port-Royalists) were feebler moral forces than Anglicanism and Puritanism, by almost as much as a French Parlement of the eighteenth century differed from an English Parliament of the seventeenth. On the other hand, in France the ecclesiastical parties had the advantage to which we attribute the better fortune of England in her secular history—the continuity of the national life was preserved, and patriotism and loyalty were not party questions. Absolutism had struck deeper roots in France than in England, and some of them must be traced far into the Middle Ages; but, even at the worst period of French despotism, there was a national life of whose healthy and harmonious development it would have been unjust and premature to despair.

The common temptation of an ecclesiastical historian is to let his work sink into a series of admiring biographies of ecclesiastical worthies: so it is an error on the right side if Mr. Jervis has given less prominence than he might to the personal element of history. Of Henry IV. or Louis XIV. perhaps he was not bound to say more than he does. Of the former's religious character, he takes as favourable a view as the case admits of: he argues plausibly that he, like his grandson Charles II., sincerely preferred a mysterious religion to a common-sense or subjective one. But it is likely that very much depended on the fact that Louis XIV. was a better Catholic, perhaps a better man, than Henry VIII.; and while Mr. Jervis is not unjust to Louis personally, he seems to regard him too much as a puppet in the hands of others. And, at any rate, it was surely the duty of an ecclesiastical historian to give us life-like portraits of men like St. Cyran, Pascal, and Bossuet. For Arnauld, Mr. Jervis has scarcely evaded the task; but for the rest of the Port-Royalists, it is no excuse to say that it has often been done before. We may fairly complain of it being neglected by a man who could appreciate their moral and spiritual greatness without being tempted to ignore the gloomy, unlovely tone both of their theology and their ethics.

WILLIAM HENRY SIMCOX.

The Feudal System in Muhammadan Countries. [*Das Lehnswesen in den Moslemischen Staaten, insbesondere im Osmanischen Reiche.* Mit dem Gesetzbuche der Lehen unter Sultan Ahmed I. Von P. A. v. Tischendorf, Ph.D.] Leipzig: 1872.

To everybody who once had, theoretically or practically, to deal with the question of Muhammadan landed property, it will be for long afterwards a *Noli me tangere*, and will disturb his rest as some ugly phantom of a nightmare. The most intricate puzzle, the chief stumbling-block for the internal policy of British India, was the land question; and

that for this sole reason, that the old Muslim conquerors had in their heads—and generally carried out—a great variety of notions regarding property, except the very simplest one, that of personal property.

To Dr. P. v. Tischendorf we owe an addition to the literature on this subject, a treatise on the feudal system in Muhammadan countries, especially in Turkey. In an introductory chapter, the author expatiates on the different species of landed property according to Muslim law. Next the theory of the feudal system (*Iktá*) is explained with some notes regarding its historical development. Passing over to the Osmanlis, he delineates their system from the foundation of the empire in Asia Minor till the reign of Sultan Ahmad I. (died A.D. 1607), during the most glorious period of Turkish history. By order of this sultan, a high official, Aíní Alí, made a collection of feudal laws, with certain proposals regarding the best way of opposing various signs of decay already then apparent. This composition of Aíní Alí's, which came out in A.D. 1609, is communicated in translation, having before been translated into French by Bélin. In a last chapter, the author treats of the decay of the feudal system, till its abolition by the Hatti-sherif of Gülkhane, in 1839. The appendix contains some useful explanatory notes, mostly of a philological nature.

From this it will appear that Dr. v. Tischendorf's book is a very acceptable gift to all those who take an interest in "the sick man." It is very well written, and gives a clear survey, condensed from various scattered materials. The sources which he has chiefly drawn upon are Máwardí, Ibn Tamáa, Hammer, Bélin, &c.

From a scientific point of view we should have wished that the author had more limited the field of his research, in which case he might perhaps have succeeded actually in increasing our knowledge on some point or other. There is an utter want of proportion between the title of the book and the book itself. Professing to treat of "the feudal system in Muhammadan empires," what does it teach us, for instance, on the feudal system of India, Egypt, Spain? Wherever Muslims settled, they followed the same theory, but it was varied according to circumstances. What is its origin? The author merely repeats what everybody says, viz. that it is of Sassanian origin. But that has never been proved. Has the theory itself undergone any important changes since the time of Abú Hanífa, Muhammad b. Alhasan (whose *Kitáb-alsair alkabir* yields abundant materials on this subject), and Máwardí? Having hoped on these and similar questions to be enlightened by the author, we confess we are disappointed. Nevertheless we readily admit that he has produced a decidedly useful book.

A particular difficulty attaches to all investigations on political institutions of Muhammadan countries. In the first place it is absolutely necessary to get an insight into the theories as propounded by the chief law-doctors, and this is not so particularly arduous. But then the relation between these theories—which are the same throughout the whole Muslim world—and the life of the nations has to be shown and illustrated, and this task presupposes almost life-long historical researches. It is the more unavoidable as it is a far spread error to believe that public life in Muslim states was never based upon any rule but the will or whim of the ruler.

ED. SACHAU.

Histoire de l'Empire ottoman. Par Th. d'Oksza. Tome I.
Constantinople : 1871.

THE author of this new and comprehensive *History of the Turkish Empire* is a Polish gentleman who has for a long time resided in Turkey and other parts of the East. He

has enjoyed ample opportunity of making himself acquainted with the institutions of the Turkish empire of our time, and with Eastern modes of thought. In the preface, p. 6, he says:—"J'ai consacré des années à réunir les faits, à les soumettre à l'épreuve d'une critique sévère; et le travail intérieur nécessaire pour se bien pénétrer d'un état social si différent de celui de l'Europe a été mon occupation principale depuis le jour où les malheurs de mon pays m'ont rendu l'hôte des Osmanlis."

The author proposes to himself to carry Turkish history down to our time, in four parts:—(a) From the time when Osman declared himself independent till the conquest of Constantinople (1300–1453). (b) The period of Turkish grandeur till the peace of Carlowitz (1699). (c) The period of stagnation and decay (till 1826). (d) The period of regeneration. This first volume contains the history of the three first rulers—of Osman and Orkhan, who founded the empire in Asia Minor, and of Murad, who first carried the victorious crescent deep into European Turkey; besides, in an introduction, the origin of the Turks is discussed, the Saljúk empire of Iconium, the circumstances under which the first leaders of the Turkish tribes rose to power and importance. It is a most interesting period in human history, and the author has succeeded in painting it in appropriate and vivid colours; he lays open before the reader the whole organism of the time, the character of the Turkish race, their institutions and warlike exploits, the condition of the demoralised and impoverished Byzantine empire, the inroads of Northern nations, &c.

The number of works on Turkish history in European tongues is legion, whilst we know of very few historians in this field besides Hammer and Rosen. Almost all books of this kind are more or less able condensations from Hammer's great and most meritorious work. But who, after him, has taken the trouble to wade through the verbose and voluminous annals of the Osmanli dynasty? who has brought criticism to bear upon the manner in which Hammer made use of his sources? Indeed, we cannot deny that very little has been done for Turkish history since Hammer, being of opinion that the work of a historian widely differs from that of any educated man who, after having amassed a certain amount of second-hand information regarding the fate of a people, begins to write their history. Turkey has mostly been the prey of the latter class of men.

M. d'Oksza cannot claim to be a Macaulay or Ranke in his line. The first condition for this would be a thorough knowledge of Eastern literature and languages, which, it seems, cannot be accorded to him. His work is based mostly upon Hammer, besides other materials available in European languages. We think he would have gained a much greater merit if he had undertaken to fill up a severely felt *lacuna* in the literature of the day—if he had composed a history exclusively of modern Turkey since 1826, of the reform in all branches in public and private life. Rosen's very useful book is, in this respect, too short and too exclusively devoted to external history. Every year, every day may make Turkey the most prominent topic of European politics, when everybody will like to inform himself of its internal life, of the very roots of its existence. And that is at present extremely difficult, regarding many subjects nothing short of impossible. For such a task M. d'Oksza would be better prepared; he would not be obliged to draw from second-hand information, and could increase and rectify the results of his investigations by personal experience and observation. Let us hope that the fourth volume, in which this period will be treated of, will give us an opportunity to acknowledge the merit of the author with less reserve.

ED. SACHAU.

New Publications.

- BAGSHOT, W. Physics and Politics; or, Thoughts on the Application of the Principles of Natural Selection and Inheritance to Political Society. (International Series.) H. King.
- EPISTOLÆ ROMANORUM PONTIFICUM genuinae et quae ad eos scriptae sunt a S. Hilario usque ad Pelagium II. Recensuit et ed. A. Thiel. Tom. I. Lfg. 2 u. 3. Leipzig: Peter.
- EXNER, A. Kritik d. Pfandrechtsbegriffes nach römischem Recht. Leipzig: Breitkopf u. Härtel.
- LÜBECK, Urkundenbuch der Stadt. 4. Theil. Lübeck: Grautoff.
- NEKRASSOW, N. Die Königinhofer Handschrift, mit Vorwort, Glossaren u. s. w. St. Petersburg: Devrient.
- PETERMANN, A. Staatswissenschaftliche Untersuchungen. I. Gemeinde- u. Bürgerrecht. Dresden: von Zahn.
- STERLING, J. Hutchinson. Lectures on the Philosophy of Law. [Summary and explanation of first part of Hegel's *Rechtsphilosophie*—with controversial appendices.] Longmans.
- THE FIRST SLAVONIC MONARCHIES IN NORTH WEST. (In Russian.) St. Petersburg: Devrient.
- VÁMBÉRY, A. Bokhara; its History and Conquest. H. King.

Philology.

Madvig's *Adversaria*. [*Io. Nic. Madvigii, Professoris Hauniensis, Adversaria Critica ad Scriptores Graecos et Latinos. Vol. I. De Arte Coniecturali. Emendationes Graecae.*] Copenhagen, 1871.

THOSE who have been accustomed to regard Madvig as *facile princeps* among European scholars in handling the texts of Latin prose authors will marvel at the resources and fertility of mind which have enabled him to issue, as a first instalment of *Adversaria Critica*, some thousands of emendations in Greek authors. The preface to this volume—a simple and modest narrative of the study-life of the man who at present divides with Theodor Mommsen the highest honours of European scholarship—assures us that it was accident rather than choice which turned Madvig's attention chiefly to Latin criticism. A mind like his, however, was never likely to specialise unduly: and indeed his work upon Cicero would have been impossible without a profound study of Greek. Meanwhile we may congratulate ourselves upon the accidental circumstances to which, apparently, we are indebted for the *Livy* and the *De Finibus*.

This first volume of *Adversaria* consists of two parts: the first book (pp. 1–184), which is a treatise on the methods of emendation, illustrated copiously by examples; and the remainder of the volume, which contains critical notes upon the chief poets and prose-writers of Greece, the latter of whom receive by far the largest share of Madvig's attention. Among these Plato, Plutarch, Xenophon, Thucydides, and Strabo are most copiously dealt with, but the author has not neglected the Greek orators, Aristotle, Polybius, Diodorus Siculus, and Lucian.

In a short *Praemonitum* Madvig says that no one will read more of this work at a stretch than the first two or three chapters of the first book: but, though to read the book through, however instructive an exercise, would be fatal to its being noticed in these pages for the next two or three years, we can honestly say that we have gone far beyond the limit which the author assigns to his reader's patience. Within our narrow limits, however, almost all that we can do is to indicate the salient points of the first book, which is the distinctive and characteristic part of the whole, and select from many good and not a few masterly emendations a few specimens as a sample of the style of the rest.

The true method of emendation is to scholarship what the true method of induction is to physical science: it grows

under the hands of a long series of workers. No one can, perhaps, ever formulate with complete exactness the conditions of a perfect emendation or a perfect scientific induction, but our sense of truth may be quite satisfied by particular cases in the one kind as in the other, and approximations to a true formula may be made which shall come indefinitely near the fact. Meanwhile, though no number of formulae will supply future workers with the judgment and divining power which must always supplement labour in striking out new lights, great scholars and great men of science who take the trouble to inform the world about their own method confer upon it an immense service. They show what has been the force of the long continued study of facts in moulding and tempering the habit of research, in narrowing the domain of futility and waste labour, and in concentrating the attention more and more upon the material which is strictly available. You cannot, by any logic, create a great discoverer or a great emender of texts, but you can guard the student, by pointing out the lines in which his science has been formed in the hands of his predecessors, from useless experiment, and thus keep longer alive and turn to better purpose what spark of original light he may possess.

In this view, the first book of these *Adversaria* will be of inestimable use to philological students. It is an effort to systematize the methods of emendation, or (we should rather say) of restoration of texts: to point out the circumstances which render it necessary, the conditions to be fulfilled in attempting it, and the limits of its possibilities. We say, of use to philological students, not to really advanced scholars: for, as far as method goes, Madvig does and can do no more than point out the lines of proceeding in these matters which all our teachers in Israel, by the force of circumstances, must now keep before their eyes: the only difference between him and others being a difference of native power in handling his materials. But to students it is of immense importance to have clearly pointed out to them what the verdict of the best modern scholarship declares to be the conditions of the material at the command of those who would attempt the task of restoring classical texts.

The principles of criticism laid down by Madvig are obvious enough when stated, but it does not follow that in their full extent they have been practically realised as he expounds them. Putting together into a short space what he says in various parts of the first book, we may briefly sum them up as follows. The need of restoring texts at all rests on the imperfection of the copies in our possession, an imperfection greater, on the whole, in the case of Latin than of Greek MSS., but varying very much according to a number of circumstances: the general rule however being that the most widely read authors are the best preserved. Scholars have been prone both to exaggerate and to underestimate the value to be assigned to the testimony of MSS.: some tending to adhere servilely to their tradition at the expense of sense and grammar, others inclining to correct them, whenever apparently at fault, like bad exercises. But MSS. have no absolute value: the MSS. of each separate author must be examined for themselves, and their relation to one another, and to the real text, determined according to the circumstances of the case. In any case, however, the scholar in dealing with MSS. has to deal with documents in which mistakes are sure to abound: mistakes, it should be remarked, chiefly, if not entirely, due to mere error of various kinds on the part of the scribes. In order to correct these mistakes and restore the author's real hand, it may be necessary to have recourse to conjecture, that is, the MSS. themselves may give little or no clue to the true reading. An alteration based on such

conjecture can only be admissible when it exactly suits what the sense of the context demands, and therefore requires, as well as considerable power of divination, a thorough knowledge of the author's circumstances, of the probabilities of his diction, and in general of the history and antiquities of the nation to which he belonged. But the limits of conjecture should be narrowed as much as possible by a thorough study of the best MS. tradition. It is far better to restore than to guess: and often a repeated examination of a MS. will reveal the traces of the obliterated reading, and lead to a certain restoration.

It need hardly be said that it is in this kind of restoration that Madvig excels, as will be shown by instances further on. All the best modern scholars, indeed, make it their chief aim to pursue this method: of which Studemund's Plautine studies, and Munro's beautiful restorations in the *Aetna*, may be taken as felicitous examples. The two great characteristics of modern scholarship are the habit of careful examination and re-examination of MS. tradition, and the increase of general grammatical, antiquarian, and historical knowledge.

In the first chapter of his first book, Madvig has been at the pains to distinguish the different kinds of weaknesses to which even the best MSS. are liable. These are either the involuntary errors of incorrect or ignorant copyists, or the intentional modifications which scribes have introduced into texts according to their own ideas of grammar or sense. Of involuntary errors Madvig makes six classes, under each of which he gives numerous specimens of his own corrections both in Greek and in Latin texts. We will briefly indicate these heads, and give an instance or two, under each, of Madvig's emendations.

(a) *Similar letters or syllables are confused*: as in Greek A and Δ, Θ and Ο, in Latin t and l, iu, ui, &c. In Plutarch, *Adv. Stoicos*, 32, 1, the MSS. give οὐδὲν ἀπολείπουνι τῶν πραγμάτων, τοῦ τοῦ, φεῖ φεῖ βοῶντες (of the Stoics' abuse of Epicurus). For πραγμάτων Madvig restores κεκραγμάτων.

(b) *MSS. are liable to erroneous punctuation and division of words*. In Seneca, *Epist.* 89, 4, Haase, giving the *ipsisima verba* of the MSS., but adding a mark of omission, edits thus: "Philosophia unde dicta sit, apparet: ipso enim nomine fatetur. Quidam et sapientium ita . . . quidam finierunt, ut dicerent divinorum et humanorum scientiam." Madvig restores, "Philosophia unde dicta sit, apparet: ipso enim nomine fatetur, quid amet. Sapientium," &c. In Gellius, vi. (vii.) 3, 34, the MSS. give "Usum esse Catonem dicit" (Tiro) "argumentis parum honestis et non viri et qui alio fuit, sed vafri ac fallaciosi." Madvig: "et non viri *aequi ahaqui*, sed," &c. In Thucydides, 8, 46, the MSS. give εὐτελέστερα δὲ τὰ δεινὰ βραχεῖ μορῶ τῆς δαπάνης περὶ ἑαυτοὺς τοὺς Ἕλληνας κατατρῆσαι; for τὰ δεινὰ Madvig and Classen correct τὰδ εἶναι.

(c) *Words, syllables, or letters, are omitted or repeated*. A fragment of Varro is thus quoted in Nonius, p. 248: "Socius es hostibus, socius ita bellum geris, ut bella omnia domum auferas." Madvig would write: "Socius es hostibus, *hostis sociis*: ita bellum geris," &c. Seneca, *Q. N.* 30, 5, most probably wrote: "Quam multa animalia hoc primum cognovimus saeculo: quam multa *ne hoc* quidem! Multa venientis aevi populus ignota nobis sciet": from which the scribe first wrote *negotia* for *ne hoc*, and afterwards corrected himself, so that the editions give, "quam multa negotia ne hoc quidem saeculo."

(d) *Words, syllables, or letters, not similar, omitted through haste*. In Quintilian, 5, 10, 56, the best MSS. give, "Genus ad probandum speciem minimum valet, plurimum ad refellendum: . . . nec, quod est virtus" (or "quod virtus est") "utique non potest esse iustitia" (or "iniustitia"). Out of this confusion Madvig elicits, "nec, quod virtus est, utique

est iustitia, sed, quod virtus non est, utique non potest esse iustitia."

(e) *The ending of a word is erroneously altered to suit the case or number of a following word* ("accommodatio grammatica"). Cic. *De Inv.* 1, 91, wrote: "Quodsi non P. Scipio Corneliā filiam Ti. Graccho collocasset atque ex ea duos *Gracchus* procreasset, tantae seditiones natae non essent." *Gracchus* was altered into *Gracchos* to suit *duos*, and hence Scipio is represented in the MS. text as the husband of his own daughter.

(f) *Notes or glosses are erroneously given as part of the text*. Thus, in Plato, *Rep.* 2, p. 364 E, Madvig thinks that ἡδονῶν is a mere gloss on παιδῶν.

Distinct from all these is interpolation proper, or intentional tampering with the text, whether by insertion, or omission, or alteration of words, by the scribe. In some cases it is difficult to distinguish this from mere error: as in Sen. *Epist.* 14, 14, where the best MSS. give, "Sed postea videbimus an *sapientiora perdenda sit*;" edited, "an *sapientia opera perdenda sit*," but emended by Madvig, "an *sapientia opera r. p. (=reipublicae) danda sit*": *perdenda* having arisen, in his opinion, from *r. p. danda*. A clearer instance is Justin, 7, 6: "Post hos bello in Illyrios translato multa milia caedit: urbem nobilissimam Larissam (capit. Hinc Thessaliam) non praedae cupiditate, sed quod &c. . . improvisus expugnat." Capit. *Hinc Thessaliam*, in brackets, is Jeep's reading: some MSS. for *hinc* give *hic* or *hic in*. Madvig considers *capit* to be the correction of a scribe, who wanted a verb, for *caput*: and that Justin wrote, "Larissam (*caput hoc Thessaliae*) . . . expugnat." A more brilliant example of Madvig's power is his emendation of Plato, *Legg.* 1, p. 633 D. Plato there is made to speak of θωμαῖαι κολακικαί, αἱ καὶ τῶν σεμνῶν οἰομένων εἶναι τοὺς θυμῶν κηρίων ποιῶσι, or μαλάττονσαι κ. π. Now in Bekker's best MS. κηρίων is only put in the margin: a later MS. inserts it in the text after ποιῶσιν, and in the same MS. a second hand adds μαλάττονσαι. The cause of these additions Madvig discerns in the word ποιῶσιν, a corruption misunderstood by the scribe, which he simply corrects into ποιῶσιν: αἱ καὶ τῶν σεμνῶν οἰομένων εἶναι τοὺς θυμῶν ποιῶσιν.

The second chapter of the first book treats of the method of restoring true readings from the MSS. themselves, or from the traces which they offer. We give three instances of Madvig's skill in this proceeding. In the *Theaetetus*, p. 175 C, Socrates is speaking of the effect produced on the common mind when the philosopher attempts to draw it from the consideration of men's ordinary talkings and questionings to higher things. An instance of these questionings is εἰ βασιλεὺς εὐδαίμων κεκτημένος τ' αὖ πολὺ χρυσίον (so the editions). But the Oxford MS. omits πολὺ. Now Hesychius has the following glosses: ταῦς, μέγας, πολὺς: ταύσας, μεγάλινας, πλειονάσας. Evidently the true reading must be, εἰ βασιλεὺς εὐδαίμων κεκτημένος ταῦ χρυσίον: Plato quoting a popular word of common (though not literary) usage. Seneca, *Ep.* 92, 12, says, according to the best MSS., punctuated by Madvig, "Itaque non est bonum per se munda vestis, sed munda vestis electio, quia non in re bonum est, sed in electione quali (ποιᾷ). Actiones nostrae honestae sunt, non ipsa quae aguntur." This gives far better sense than the common reading of the editions, "sed in electione, quali actiones nostrae honestae sunt," &c. Seneca means that excellence lies in the *quality of our choice*. Ovid is made to say in the common editions (*A. A.* 3, 440), "Vix mihi credetis; sed credite! Troia maneret | Praeceptis Priami si foret usa sui." But the best MSS. have *Priame, tuis*, for *Priami, sui*. *Priame* stands simply for *Priamei*, vocative of *Priameis*, i. e. Cassandra. "Troia maneret, Praeceptis, Priamei, si foret usa tuis." We have not space

to notice other brilliant restorations in this chapter, as *ε. g.* *Πρωπόιτου θυγατράσιν* for *προσπάλου θυγατράσιν* in Plutarch (*περί τοῦ, ὅτι μάλιστα τοῖς ἡγήμοσι, &c.*), p. 118.

The third chapter contains a number of restorations of proper names obscured in MSS. We may notice in particular *Ευδικίνους* for *οἱ δ' ἐκείνους* in Strabo, 5, p. 242 (p. 132): *Συμαίθου καὶ Παντακίου βρόντων* for *συνελθούσαι καὶ πάντα καταβρόντων*, *ib.* 6, p. 267 (p. 133): καὶ *Νηλέως* for *καλῶς* in Lucian, *Adm. Indoctum*, 4 (p. 143).

The fourth chapter is a short treatise on the extent to which MSS. are liable to err in matters of grammar, which resolves itself chiefly into a protest against those scholars who have refused to accept the distinctions laid down by Madvig between the use of the aorist and the future infinitive.

Madvig seems to us far less happy in dealing with the poets than with the prose authors of Greece. To see what a poet could not have written is easier than to guess what he must have written. Not only are the corrections which Madvig proposes, to our mind, seldom convincing, but he professes (perhaps as a propitiation of Nemesis) to think it possible that Sophocles could have written *κούδεις ἐπίσταται μοι συλλαβεῖν τόπος* (p. 209). H. NETTLESHIP.

Sexti Aurelli Propertii Carmina. By F. A. Paley. Second Edition, Bell and Daldy, 1872.

GRATIFYING as the fact will not be denied to be that a second edition of an author so difficult and, for various reasons, so little read in England as Propertius has been called for in the space of twenty years, it is disappointing to know that in that interval little, if anything, has been done to clear up the obscurities of reading and meaning which the laborious care and admirable scholarship of Hertzberg had left unsolved. No one, we think, who has investigated the style of Propertius will feel satisfied with the flimsy and quite inadequate performance of the latest continental editor, L. Müller: still less with the gratuitous and absolutely groundless transpositions of Dominico Garutti's *Cynthia*, a work which, if possible, would make criticism impossible. Yet how much remains to be done still! Are these obscurities hopeless? We are persuaded that they may still be unravelled, and we are confident that the path to their interpretation is yet open to anyone who will patiently ransack the less explored fields of Greek and Roman literature, *e.g.* poets like Callimachus, Lycophron, and Apollonius Rhodius, with their scholia, or, again, such information as is contained in the varied and miscellaneous remains which constitute the *Fragmenta Historicorum* and *Geographorum Graecorum*. In one word, Propertius wrote like a learned man, and with very little simplicity; and he must not be interpreted as if his language were anything short of complex or his allusions anything but easy to discover.

We are doing Mr. Paley no injustice when we say that his edition, useful and suggestive as it is, does not, in the above mentioned particular, attain to the highest mark—perhaps a life's study only could: and yet from an editor of Aeschylus we had looked for more certainty. There are, we think, many interpretations in this edition which a repeated study of the author makes not only improbable, but certainly wrong; there are cases where a more recondite MS. reading is either ignored or rejected without sufficient investigation; some where the editor has unnecessarily admitted conjectures—a fault, however, from which Mr. Paley is, compared with the latest continental editor, fortunately free. And is not Mr. Paley unjustifiably severe on one of the greatest of philologists, Scaliger? or could Scaliger have proposed so bad an emendation as

Aut quid tibi Chii, tibi praeant carmina lecta?

or *Auersis rhythmis cantas?* It would have been more satisfactory, at least to English admirers (and they are more than might be supposed) of Propertius, if Mr. Paley, instead of crowding his pages with the crudities of L. Müller, had weighed more deliberately the observations of that older school of critics who, like Barth and Passerat, concentrated their learning on clearing up the difficulties of the text, without seeking the doubtful cure of conjecture, or, again, had not neglected or ignored those occasional solutions of difficulties which, out of the way of foreign editors, were in the immediate reach of an Englishman. We allude *e.g.* to the difficult lines, *iii.* 26, 81–84:

*Nec minor his animis, aut si minor ore, canorus
Anseris indocta carmine cessit olor,*

on which Professor Munro has written a short article in the *Journal of Philology*, *ii.* p. 143. We have little doubt that the main view there put forward, *viz.* that *haec* and *animis* refer, not to the *Eclogues* and *Georgics* together, but to the *Eclogues* alone, is right; and this whether we accept Ribbeck's transposition and Munro's *Anseri* or not.

The most interesting part of Propertius to most readers is the first four books, which are mainly occupied with the various phases of the Cynthia amour; but it is the last, in this edition the fifth, book on which Mr. Paley has accumulated most new material, and where his commentary has, in his own judgment, most claim to originality. We offer the following remarks here. In *i.* 31, for *Luceresque coloni*, the Naples MS. gives *Soloni*, and that this nominative plural is right is probable, not only from the first reading of the Hamburg MS. *solemni*, but from the comparative rarity of the word. Hertzberg remarks on the miraculous coincidence of this, to him, mistaken reading with Dion. H. *ii.* 37, *ἦκε δὲ αὐτῷ Τυρρήνων ἐπικουρίαν ἱκανὴν ἐκ Σολωνίου πόλεως Λοκόμων*; it is at least equally probable that the poet and the historian are alluding to the same tradition. Mr. Paley has himself called attention to the fact, so signally true of Propertius, that his allusions are, to the less known, more recondite legends, *e.g.* when he makes the Simois of the Trojan Ida the birthplace of Jupiter (*iv.* 1, 27), or represents Melampus as submitting to imprisonment from love of Pero, whereas the ordinary story makes the lover of Pero to be Bias, Melampus' brother (*ii.* 3, 53). In the same elegy we cannot approve of Mr. Paley's transpositions of vv. 83–86, necessitating, as this does, so improbable an interpretation of vv. 81, 2, as he is induced to give; for that *iterata* can either mean “hackneyed” or is equivalent to *iterata sunt* is, in our judgment, equally improbable. Lachmann, in his unpretending but admirable edition of 1829—as far above his former edition as his *Lucretius* is above both—points out the construction; *obliquae signa iterata rotas* begins a new clause, which, with vv. 83–86, depends on *Dicam*: then the words *Troia cades et Troica Roma resurges* are a sudden apostrophe, quite in Propertius' style. In *v.* 3, 56, *Illa tui partem vindicat una toro*, we demur to the meaning “vindicat sibi partem quam tu debebas (solebas) capere in toro,” which would surely require *tuam*; the idea seems to be that the lap-dog is the only thing which is admitted to its mistress's couch as claiming some part of the affection which belonged to the husband, literally, “she alone claims some part of you as her own.” In *v.* 7, 64, *Narrant historiae pectora nota suae* is at least intelligible; the two wives, Andromede and Hypermnestre, faithful bosoms well known to the annals of their country, each tell their story: the harshness of the naked *narrant* is quite relieved by being drawn out at greater length in the following lines, *Haec queritur—Narrant Hypermnestre*: in *v.* 78 of the same elegy, *laudes meas* must surely be “praising me,” not “the credit you gain from me.” In

v. 8, a difficult elegy, and one in which Mr. Paley's commentary seems to us less trustworthy than usual, we should prefer to take *primo temone* with *sedens*, not with *pendit* (21); to explain *impuros* (22) as "disreputable," not "rough"—a meaning which the use of *purus*, like *καθαρός* for "clear," "unimpeded," hardly justifies; to interpret *Recidit inque suos mensa supina pedes* (44) of the table toppling over and falling backwards, rather than of the movable slab slipping from the top, in which case *in suos pedes* is, to say the least, obscure; to explain *gaudet in exuviis* (63) not like *gaudeat in puero* (ii. 4, 18), but in the same sense as *cum fuit in tunica*, i.e. holding in her hands the tatters of dress and shreds of hair which are the signs of her rival's defeat: lastly, to retain, as Mr. Paley himself half inclines, *toto toro* (88) against the more decorous, less characteristic *tuto*. In book i. 20, *Ah! dolor! ibat Hylas, ibat Hamadryasin*, we do not know whether any one has noticed the close correspondence of the expression with a line in Parthenius (Ἐρωτ. Παθ. xiv. 22), Αὐτὸς δ' ἐς Νύμφας ὤχετ' Ἐφροδιάδας: a correspondence sufficiently marked, we think, to determine the construction of *Hamadryasin* after *ibat*, not, as Hertzberg, after *dolor*; the probability is scarcely weakened by the fact that the nominative in the line quoted by Parthenius is not a person, but a pail (γαλός). That Parthenius was known to Propertius is likely not only from other resemblances, e.g. the story of Tarpeia betraying her country to Tattius, and as a punishment being buried beneath the shields of his soldiers, as compared with Parthenius' narrative of Peisidike betraying Methymna to Achilles, and being stoned by his army in consequence (Ἐρωτ. II. xxi.), but from the attraction which such a writer would have, partly as the narrator of the less known love-stories, partly from his connection with Propertius' great predecessor in elegy, Cornelius Gallus, to whom the book Περὶ Ἐρωτικῶν Παθημάτων is dedicated, partly from the favour which, according to Suetonius, Tiberius extended to this recondite and somewhat affected author.

The editor of this *Propertius* may fairly be congratulated on the general tone of his commentary. He might have been pedantic or squeamish: he has avoided either fault. No one will, we think, complain that he has dwelt unnecessarily on vicious terms or allusions; still less that an over-sensitive morality has deterred him from stating as much as is indispensable to a proper understanding of his author. Mr. Paley has sufficient sympathy with the description of one of the most genuine passions extant in the writings of classical antiquity, not to offend in either direction.

R. ELLIS.

THE LATE VICOMTE DE ROUGÉ.

THE death of Vicomte de Rougé makes a gap in the ranks of the Egyptologists greatly to be deplored. His earliest contributions to Egyptology were in 1846, when he reviewed the first volume of Bunsen's *Egypt's Place in the World's History*, and pointed out the necessity of a more careful analysis of the Egyptian texts than had hitherto prevailed. This was followed by a series of articles in the *Revue archéologique*, in which various texts were discussed with accuracy and extraordinary ability. Two translations, one of a stele in the Papalacqua collection, the other of the so-called statuette Naophore in the Vatican, appeared in 1849 and 1851, but unaccompanied by the original texts or by explanatory commentaries. In the *Mémoire sur l'Inscription du Tombeau d'Ahmès* (1851), M. de Rougé discussed every word and sign with minute care, and set an example of the method of treatment which alone can lead to satisfactory results. In 1852 he published a translation of a considerable part of the D'Orbigny papyrus (*Tale of the Two Brothers*), of which he was fortunate enough to obtain the perusal, long before the text was published by the British Museum. In 1856 appeared a translation of the poem of *Pentaur*, from the Sallier papyrus No. 3, and this was followed by a careful analysis of the curious stele in the Bibliothèque Nationale, relating to the cure of an Asiatic princess who was possessed by an evil spirit. In 1860 commenced the explanation of the Ritual in

the *Revue archéologique*, and in this year M. de Rougé was installed in the chair of Egyptology in the College of France, where for many years his lectures were attended by a small but appreciative auditory, to whom he expounded the principles of careful analysis upon which he himself proceeded. In 1863 he went upon a mission to Egypt, and brought back a rich harvest of inscriptions. The *Recherches sur les Monuments des six premières Dynasties*, a work of great care and elaboration, appeared in 1866, and in the same year was commenced the publication, in parts, of a Hieratic Ritual from papyri in the Louvre. This work, unfortunately, is yet incomplete. The *Chrestomathie égyptienne*, a systematic introduction to the study of the Egyptian language, was begun in 1867, and a second fascicule appeared in 1868. Papers on the Pianchi stele of Gebel Barkal, on the intercourse of European nations with Egypt, and on many inscriptions of historical importance, have also appeared from the pen of M. de Rougé during the last ten years, and our catalogue of his contributions to Egyptological science must not be considered by any means a complete one. A scrupulous philological accuracy is the distinguishing characteristic of all of them, and no writer in the school of Champollion has been more successful in the scientific application and expansion of the principles of the great master.

M. de Rougé had the singular happiness of having a son who shared the enthusiasm of his father for Egyptological research, and who has already distinguished himself by various articles of great merit, principally in the *Revue archéologique*.

Intelligence.

Professor A. Weber's essay on the *Rāmāyaṇa*, which was published in the *Abhandlungen* of the Royal Academy of Berlin, and of which an English translation, by the Rev. D. C. Boyd, appeared in Mr. Burgess' *Indian Antiquary* for April, June, and August, 1872, is beginning to be severely commented upon by Hindu scholars. It will be remembered that the paper referred to attempts to prove that Vālmiki, the composer of the Hindu epic, was acquainted, either directly or indirectly, with Homer's *Iliad*; and that the main plot of his composition—the abduction of Sītā to Lankā (Ceylon), as well as several other incidents—were taken from the Greek poem. Professor Weber also maintains the story of Rāma, as contained in a Buddhist treatise, the *Daṣaratha Jātaka*, to be a more ancient version of the legend, not yet adulterated with elements of Western origin. The current weekly numbers of the *Native Opinion*, of Bombay, contain a very able and dignified review of the essay, by Mr. Kāshināth Trimbak Telang, "Was the *Rāmāyaṇa* copied from Homer?" being a paper read, on September 2, 1872, before the Students' Literary and Scientific Society at Bombay. This writer endeavours to refute Professor Weber's arguments one by one, showing no ordinary acquaintance with Sanskrit literature and the writings of European scholars. Particular stress is laid on the total want of correspondence in the delineation of the various characters introduced in the two poems. The first number of Mr. Mookerjee's *Magazine* (July 1872) also contains a brief notice of the essay, by Bābū Rājendralāl Mitra, who, without at all entering into the merits of the case, tries to pooh-pooh the matter, and to treat the whole discussion as a joke of Professor Weber's. He also believes that European *savants* are generally disposed to receive Professor Weber's views as facts. We are not, however, aware of any European scholar having as yet expressed his opinion on the matter, either for or against the views of Professor Weber.

It will be satisfactory to Sanskrit students in this country to learn that the catalogue of the Sanskrit books in the British Museum is now complete, and may henceforth be consulted in the Reading Room. It is to be hoped that so valuable a contribution to Sanskrit bibliography will be made available to all students. Next to the library of the late Professor Goldstücker, the British Museum probably contains the most complete collection of printed Sanskrit works; and no catalogue of the former being, as far as we know, in preparation, the trustees would no doubt render a good service to Sanskrit scholars by allowing their catalogue to be printed.

Contents of the Journals.

Kuhn's *Beiträge* (VII. 3) consists this time of only two articles. The one by Spiegel, on Burnouf's Zend investigations, combats the prevalent supposition "that Burnouf obtained his results by means of comparative philology; that he discovered the meaning of Zend words by comparison with Sanskrit; and that he thought next to nothing of the assistance of tradition—in fact, Spiegel asserts that he entirely departs from tradition in only twenty-eight words out of a thousand." The other is by Fick, on Lagarde's Phrygian glosses. By means of these he proves that the Phrygians were not only Indo-Europeans, but that they were more closely related to the Aryans of Europe than of Asia; whether of the north or of the south of Europe, he leaves to be decided another time. As to *δρον*, "above," the most certain analogue

occurs in the Gaulish *ver-*, Welsh *guor-*, *gor-*, and *gwar*, *ṛd āw*; nor need ἀδάμειν (= φιλειν) be Iranian—compare the Old Irish proper name *Adamán*.

Zeitschrift für vergleichende Sprachforschung, Vol. XXI. Pt. 2 and 3.—This double number is chiefly devoted to "Umbrian Studies," by J. Savelsberg. [The article (or book, for it occupies 140 pages) calls for a detailed examination. The matter is arranged under the different phonetic changes exemplified; and several collateral subjects are discussed, in particular (under the change from *v* to *h*) questions relating to the Greek and Latin conjugation.]—Miscellaneous, by H. Kern, are—(1) *gāvi*, "cow;" (2) the Oscan perfect in *-tte*; (3) the Oscan words *bratēis* and *cadeis*.—E. Windisch reviews Dr. H. Brunnhofer's *Palæolac, the Græco-Italian Name of Milk*. [Rejects, after a most careful examination, the author's theory that the root is *gal*, "to swallow," and proposes *gal*, "to drip," instead.]—Schweitzer-Sidler reviews several important recent books:—Enderis, *Versuch einer Formenlehre der oskischen Sprache*; Abel, *Ueber einige Grundzüge der lateinischen Wortstellung*. [Thoughtful, connecting language with psychology.] Ascoli, the German translation of his *Corsi di Glottologia*; Hadley, *On the Nature and Theory of the Greek Accent*; Whitney, *On the Nature and Designation of the Accent in Sanskrit*. [Papers from the Transactions of the American Philological Association, 1869–70, which have been noticed in the *Academy*.] *Mémoires de la Société de Linguistique de Paris*, t. i. 4^e fasc. [Valuable papers.]—Rumpelt, *Die deutschen Pronomina und Zahlwörter historisch dargestellt*.—Works of Professor Elia Lattes, of Milan, viz.: (1) *Osservazioni sopra alcune Iscrizioni etrusche* (Memoria del professore Elia Lattes, s. corresp. del R. I. Lombardo; 9 dic. 1869); (2) *Osserv. cet.*, "lette nell' adunanza del 9. nov. 1871, del R. I. Lomb. di scienze e lettere"; (3) *Osserv. intorno alle Epigrafi etrusche fiorentine* del tipo dell' undecima bilingue, "lette nell' ad. del 28 dic. 1871"; (4) *Intorno alle Ep. etr.* (Fabr. 384–397) del t. dell' und. bil., ed intorno ad altre unilingue, comprese fra' numeri (Fabr. 73–231); osserv. "lette nell' ad. del 25 gennajo 1872"; (5) *Intorno ai tipi delle Ep. latine dell' Etruria*, confrontati con quelli delle Ep. etr.; osserv. presentate nell' ad. del 21 marzo 1872; (6) *Intorno alle Unilingui etr.* (Fabr. 402–462 ter) del t. dell' und. bil. ed intorno alle varietà di quel tipo; osserv. pres. nell' ad. del 21. m. 1872. [The result of these investigations, which Dr. Schweitzer-Sidler accepts as certain, is that Etruscan is an Indo-Germanic language, one of the Italian group; and that the inscriptions contain chiefly proper names, among them a large proportion of female names. They offer a rich harvest for the subject of Italian declension, word-formation, and nomenclature, and are of the highest importance for Italian phonetics and palaeography. It is reported that Corssen has arrived at similar results.]—Leskien reviews Miklosich, *Die slavischen Elemente im Neugriechischen*. [The influence of Slavonic on modern Greek has been very slight: that of Albanian has been the most important, next that of Romance and Turkish.]—Gothic *vopija*, "I call;" by Joh. Schmidt.—Two Indian similes, by Windisch. [Exemplify the use of the potential, as in Homer.]

The Indian Antiquary. Part IX. Bombay, September 1872.—Biographical Notices of Grandees of the Mughul Court; by H. Blochmann. [Continued; on the titles in use at the Delhi court; biography of Vazir Khan Hakim 'Alim Uddin; and Rājah Basu of Nūrpur in the district of Kāngrah.]—On the Bhar kings of Eastern Oudh; by W. C. Bennett. [This dynasty appears to have reigned from about 1100 A.D., their kingdom stretching from Malwa to Mirzapur and Faizabad, with its principal strongholds at Kalangar and Karra; and was overthrown by Nasiruddin in 1247 A.D., when the last kings, Dalki and Malki, were slain under the walls of the Dalman fort.]—A specimen of Kashmiri: *The Dastān Sheikh Shibli*, in Kashmiri verse, with an interlinear and a literal translation; by G. W. Leitner.—Translation from the first book of the *Prithirdja Rāsau*; by Kavi Chand Bardāi. [A paraphrase of the first book, except the introductory portion.]—The Bhūtas of Nagara Malnād in Maisūr; by V. N. Narasimmiyengar. [On the superstition, worship of demons (bhūtas), &c. in Mysore.]—Bengali Folklore: Legends from Dinajpur; by G. H. Damant. [Continued.]—Review [favourable] of M. A. Sherring's *Hindu Tribes and Castes as represented in Benares*.—Correspondence.—Part X. October 1872.—Stone Monuments in the district of Singhbhūm; Chotā Nāgpur; by V. Ball. [On the practice of the Chotā Nāgpur Kols to erect monuments to their deceased friends.]—Notes on the *Rasakallola*, an ancient Oriya poem; by J. Beames. [Continued.]—The Caves of the Brazen Glen and other remains about Mauje Pātna, Taluka Chalisgaum; by W. F. Sinclair. [Description of some caves, supposed to have been viharas, in a valley in the Sātmalā range.]—The Date of the *Nyāyakusumānjali*; by Kashināth T. Telang. [Contests Professor Cowell's determination of the date of that work (twelfth century), by showing that Udayanāchārya, its author, was a different writer from the Udayana who has commented on a work of Vāchaspatimīśra. According to the writer's reasoning, the *Kusumānjali* cannot have been composed later than the eleventh century.]—On the Date of Patanjali, and the King in whose reign he lived; by R. G. Bhandarkar. [From a passage in Patanjali's commentary on Pāṇini, the *Mahābhāṣya*, Professor Goldstücker maintained

that Patanjali must have lived about 144 B.C. Mr. Bhandarkar now adduces another passage, which seems to point to Pātāliputra as the residence of Patanjali, under King Pushpamitra, who probably reigned from 178 to 142 B.C.]—On the *Vṛikāthakāthā* of Kshemendra; by G. Bühler. [Somadeva, the author of *Kāthāsaritṣāgara*, states that his work contains the essence of the *Vṛikāthakāthā*, written by one Guṇāḍhya in Prākṛit. It is also evident from Daṇḍin and Subandhu that such a work existed in their time, and that it was divided into sections called lambas. Dr. Bühler now has discovered a MS. of a *Vṛikāthakāthā* in Sanskrit, by Kshemendra, in lambas, wherein the author states to have rewritten Guṇāḍhya's work in Sanskrit.]—An Interesting Passage in Kumārila Bhaṭṭa's *Tantravārttika*; by A. C. Burnell. [In this passage Kumārila (seventh century) mentions some Telugu words which are still current.]—Sketches of Mathurā; by F. S. Growse. [Continued: IV. Barsāna and Nandgānw. The former town, the home of Krishna's favourite mistress Rādā, dates from the time of Rūpa Rāma, a Kāṭāra Brahmin and Purohita to Bharatpur, Sindhia, and Holkar. Nandgānw, the reputed home of Krishna's foster-father, is said to have been founded by Rūpa Sinha, a Sinsinwār Jāt.]—On some Eminent Characters in Sanskrit Literature; by Sashagiri Śāstri. [Account of Vikramāditya (Vikramārka); and Bhoja, king of Dhārā in Malwa.]—Asiatic Societies.—Miscellaneous.—Part XI. November 1872.—Kirtans, or hymns from the earliest Bengali poets; by J. Beames. [Six popular Vaishṇava hymns, Bengali text and English translation.]—The Celts of Toungoo; by F. Mason. [Descriptions, illustrated, of ancient stone and copper implements, found in Burmah. The writer supposes them to have been introduced in former times from India and China; as copper and basalt, and other stones of which they are made, are foreign to Burmah.]—Dondra Inscription; by T. W. Rhys Davids. [Elu (ancient Sinhalese) stone inscription of a king, Sanga Bo, supposed by the writer to date from about A.D. 712.]—Nārāyaṇ Svāmī; by the editor. [Historical account of Nārāyaṇ Svāmī and his sect in Gujarāt and Kāthiāwād. The founder of the sect was born at Chupiyā, near Ayodhyā (Oudh), in 1780, and died at Dādā Khachar in 1829.]—Some Account of the Pālis of Dinajpur; by G. H. Damant. [Account of the customs of this tribe, which are in many respects peculiar, and different from those of other Hindus.]—On Some Eminent Characters in Sanskrit Literature; by M. Sashagiri Śāstri. [Continuation: Kālidāsa.]—Śrāvaṇa Saturdays in Southern India; by V. N. Narasimmiyengar. [Account of a vow made in honour of the god Śrīnivāsa Svāmī of Tirupati, consisting of a begging excursion on Saturdays in the month of Śrāvaṇa.]—Bengali Folklore: Legends from Dinajpur; by G. H. Damant. [Continued.]—Manga Rāja's or Kavi Manga's *Abhidhāna*; by F. Kittel. [Account of a MS., discovered by the writer in the Rāja's library at Maisur, of a hitherto unknown Canarese dictionary of considerable value, entitled Manga Rāja's *Nighaṇṭu*.]—Archæology in the Kṛishṇā District. [Extracts from the Proceedings of the Madras Government, June 7, 1871: Letter from Sir W. Elliot to the Under Secretary of State for India.]—On the Gonds and Kurkus of the Baitul District; by W. Ramsay. [From the Report on the Land Revenue Settlement of the Baitul District: Accounts of those two tribes, both of which claim a Rājput origin. The language of the Gonds is said to contain no element of Sanskrit or other roots of the present Hindu language; whilst that of the Kurkus is held to have a decided affinity to Telugu.]—Asiatic Societies.—Review [favourable] of F. Kittel's *Yajñatantrasudhānidhi*, Mangalore, 1872; by A. B.—Correspondence and Miscellaneous.

The Pandit. Vol. VII. Nos. 74–77. Benares, July–October 1872.—The *Śabdakhaṇḍa*, or fourth chapter, of the *Chintāmaṇi* (a celebrated work on the Nyāya philosophy), with Ruchidattamiśra's commentary. [Continued.]—The *Brahma-mīmāṃsā*, or *Vedānta* aphorisms, with Kanthāśivāchārya's comment. [Continued: Adhyāya I. pādas 3 and 4; Adhyāya II. pādas 1 and 2 (one pāda in each number).]—The *Karpūra-manjarī*. [A *Saṭṭaka*, or dramatic composition in the Prākṛit dialect, by Kājaṣekhara; edited, with a Sanskrit translation, by Vāmanāchārya. Concluded in Nos. 74–76: Acts (*Javanikāntara*) 2–4.]—Obituary Notices (in Sanskrit) of Dharmārāma (Ceylon) and Professor Goldstücker (No. 74).—The *Vidvanmanoranjanī*, or "Rejoicer of the Mind of the Learned," a commentary on Sadānanda's *Vedāntasāra*, by Rāmatirtha; edited, with an English translation, by A. E. G. and G. D. [Continued in Nos. 75–77.]—*Katipayāgṛasamāhāra*. [Problems and solutions, in śloka, by Vināyakaśāstri; Nos. 76 and 77.]—Catalogue of Benares Sanskrit Manuscripts. [Continued.]

Philologischer Anzeiger, Vol. IV. No. 11.—The principal works reviewed are: On National Education, by the author of *Letters on Berlin Education*. [Advocates greater prominence to Greek as compared with Latin, suppressing composition, teaching grammar by reading instead of by the learning of rules, simplifying examinations, &c. The reviewer recognises the evils to be met, especially the tendency to exercise the memory and not the judgment, but doubts the efficacy of some of the remedies proposed.]—Dr. J. Lattmann: The reform in the elementary teaching of the ancient languages brought about by the modern science of language. [Wishes to base the teaching of comparative science of language upon a German grammar, of which the kernel

shall be Middle High German: the reviewer prefers Greek, beginning with Homer.]—J. Lattmann and H. D. Müller: School Latin Grammar.—Dr. A. Dräger: Historical Syntax of the Latin language. [Recognises the great merit of the book as the first comprehensive attempt of the kind.]—H. Lutze: De Homericorum carminum ratione strophica.—Gul. Fries: De anacolutis Sophocleis, pars prior.—Roesner: Rerum Prænestinarum, pars iii.—Dr. H. Babuche: The development of the organization of the Roman army.—August Boeckh: Collected minor writings, sixth volume, viz. Academic Dissertations delivered in the years 1836–1858, in the Academy of Sciences at Berlin.

New Publications.

- APULEII Psyche et Cupido rec. et emend. O. Jahn. Ed. altera. Leipzig: Breitkopf u. Härtel.
- BUCHHOLZ, E. Die homerischen Realien. 2. Abth. Die drei Naturreiche. Leipzig: Engelmann.
- CARNUTH, O. De Etymologici Magni Fontibus. Berlin: Bornträger.
- CURTIVS, Geo. Studien zur griechischen u. lateinischen Grammatik. 5. Bd. 2. Hft. Leipzig: Hirzel.
- GRUMME, Dr. Alb. Commentatio de Taciti Historiarum libri primi capite LXX. Gerae. (Berlin: Calvary and Co.)
- HAYMAN, H. The Odyssey of Homer. Vol. II. Bks. VII.–XII. Edited with Notes, &c. Nutt.
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THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

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REGISTERED FOR

SATURDAY, FEBRUARY 15, 1873.

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[Price 6d.]

General Literature and Art.

P.-J. Proudhon. *Sa vie et sa correspondance.* Par C.-A. Sainte Beuve. Michel Lévy.

THE literary world was surprised and somewhat shocked when, in 1865, the *Révue Contemporaine* published the first of the *Études* collected in the present volume. Sainte Beuve, it was well known, was the most indulgent as well as the most conscientious and penetrating of critics; but why he should go out of his way to tolerate the intolerant foe of property, God, and the romantic literature—how, not content with tolerating, he should evidently sympathize and avowedly admire,—these were indeed perplexing questions. In the work as it now appears (still unfortunately incomplete), the points of sympathy are made more evident than the grounds of admiration; it is Proudhon as a man rather than as an author that the critic aims at appreciating and vindicating, and though in his case the two characters blend more closely than usual, the positive value of his literary work is less clearly defined than is customary with Sainte Beuve. This defect might have been supplied had the life, which stops before 1848, been continued down to the date when Proudhon delivered his protest against the effeminate literature of the day in *La Justice dans la Révolution*, or discussed the question of literary copyright by the light of his peculiar views about property in general. But it is easy to see that what first attracted the attention of the eminent *feuilletonist* to the not less eminent pamphleteer was a certain versatile catholicity of mind common to both, while on a nearer acquaintance it appeared that the revolutionary economist and the romantic poet had a still deeper ground of sympathy in the scepticism which was their common salvation from the opposite dangers, charlatanism and platitude. Sainte Beuve was touched to find a politician, an agitator, like Proudhon, professing, not sound philosophy, but any philosophy, showing, not a correct critical taste, but at least a sense of the existence of taste. Proudhon, on the other hand, could not but be mollified, on the rare occasions when the two came in contact, by the complete absence of prejudice in the Imperial senator, who looked upon property as an affair of police regulation, and was not prepared to maintain that anybody had a divine right to anything, but

wished sincerely well to the many practical reforms that such a doctrine suggests.

Pierre-Joseph Proudhon was born at Besançon, in January, 1809. His father worked in a brewery, his mother was a peasant girl who had been in service; but they gave their son what education they could, and at fourteen he began to frequent the public library of the town, and astonished the librarian by sometimes asking for eight or ten books at a sitting. At nineteen he took to printing as a trade, and after making the tour of France as a journeyman, and passing through the intermediate grades of compositor and *prote*, he became a corrector for the press, and found means to learn Latin and a little Hebrew while revising the proofs of an edition of the Fathers and the Vulgate. What he learnt in this way was certainly better than nothing, and enabled him to write an Essay on Grammar, which served as a title for his election to a pension of 1,500 francs, tenable for three years, which the Academy of Besançon had to award to the most promising poor student of the place. It gave a piquancy to his later controversial writings that he was one of the few French laymen who could quote Scripture, and his habit of beginning every discussion rather "*avant la création du monde*," may have seemed to himself and the more candid of his proletarian readers, as an earnest of scientific impartiality. His occasional display of obsolete or undigested learning was never more than a harmless pedantry, not affecting the substance of his real work; but his judgment was usually so clear that we have to think of him as practically self-taught to explain the peculiarity. His intellectual sympathies were so varied that whatever subject he knew anything about interested him, and consequently found a place in the general scheme of his meditations; but as his knowledge was far from universal these subsidiary studies do not join on to the rest as harmoniously as if they had been deliberately chosen. Sainte Beuve lays some stress on this unfamiliar side of Proudhon, as a *savant* spoilt, and it certainly appears, from letters to his earliest and most intimate friends, as if there had been a time when philology or metaphysics might have offered scope enough for his reforming zeal. His pension was forestalled to discharge his business debts (his partner in a printing speculation had committed suicide), and it was during the three lonely years of privation, bordering

E

on misery, which he spent in studying at Paris, that he seems first to have accepted as a vocation the redress of the economic wrongs of his order. In his first memoir, containing the famous definition, "Property is theft," he calls himself "chercheur de vérité, en grec skeptikos," yet just before the publication of the work he had written to a friend, "pray God I may find a publisher; it may be the salvation of the country." All through life his mental attitude remained the same. He believed there were salutary economical truths waiting to be discovered; while in the first fervour of production he believed that he had already discovered and was able to reveal them: calmer reflection or the indifference of the world would then persuade him that the revelation was still incomplete; but he never made his faith in the reality of the truths he was seeking depend on the success of his individual efforts; nearly all his outbursts of hope and pride end with a sigh of self-distrust: "Heaven forbid that I should magnify my part: I am telling my dreams." "Happy, thrice happy, they who can be satisfied with themselves!" is his answer to the taunt that he wishes to demolish everything, private property, community of goods, monarchy, democracy, God and the devil, and is not even satisfied with himself. He never troubled himself to avoid inconsistencies: to see a truth was to be obliged to tell it: if he had failed to see it before, so much the worse, but still, better late than never. Only, as he grew older and less sanguine, his discoveries and his criticism became more uniformly negative and destructive: it was still his ambition to reconstruct, but time and allies failed him. Sainte Beuve does not, of course, discuss at length the elaborate arguments by which Proudhon defends his initial paradox; probably he thought that eternal justice and reason had as little to do with the right of possession as with the right of property, and his criticism is only "il s'était logé dans la tête un *absolu* de vérité; il mé connaissait l'éternel à *peu près* des choses humaines et la marche boiteuse des sociétés." But this is not quite just, for Proudhon, while believing in the absolute equity of what he calls *mutualism*, never ventured to prophesy its universal acceptance, or to ignore the passions which founded and perpetuate the present anti-social order. His favourite metaphysical doctrine was of a necessary flux, rhythm, or opposition throughout the universe; the lameness of progress was an *a priori* truth, and it was certainly present to his mind when he gave Prince Napoleon the famous answer: "'Mais,' dit le prince étonné, et qui ne s'étonne pourtant pas volontiers, 'quelle société rêvez vous donc?'—'Prince,' répondit Proudhon avec son éclat mordant, 'je rêve une société où je serais guillotiné comme conservateur.'" Opposition was a law of nature, and he was its prophet; if his friends were in power they were sure to go too far (l'éternel à *peu près* des choses humaines) and it would then be his hard fate to oppose their errors; hence his comparative content with an established government that he was free to oppose, like the Empire, or, what he had thought more probable, Henri V.; since offences must come, and since it was his mission to call down woe upon the man through whom they came, he preferred, other things being equal, to have to denounce a Bonaparte or a Bourbon rather than Louis Blanc or Pierre Leroux. He was one of those impracticable politicians who take the crimes of an enemy as a matter of course, and are only seriously distressed by the backslidings of their own partizans. But we are anticipating 1848.

His *Mémoires sur la Propriété* contained the germ of the mutualistic theory of morality which he never actually developed into a system. He does not here seek the origin of the idea of justice in general, which the defenders of property were not likely to deny; but, taking the moral law for granted, he places its sanction in the objective characteristics

of the race, which makes a law to itself of whatever has to be done or forborne under penalty of the disintegration of society. It is admitted to be theft or dishonesty for one man to take an unfair advantage of another, and his argument is that every advantage is "unfair," because no one consents willingly to a bargain by which he is a loser; his consent can only be secured by force or fraud, constraint or deception, both of which are unjust. The only lawful property is the possession of the instruments of production, and if these are limited in extent (like land) they ought to be equally divided, even at the cost of limiting the production of some, a consequence which, it may be observed, could scarcely follow under a "mutualist" régime, though he accepts it, apparently regarding nature as a great capitalist whose wages fund is limited. Insufficient wages lead to competition amongst the labourers for a monopoly of work, which is a fresh source of inequality and misery, or rather an artificial reproduction of the natural "antinomy," or strife, between man and God. God, in his second famous paradox, "Dieu, c'est le mal," seems to stand for all the brute forces of the natural world which make the conditions of human life; but the conclusion to which all his far-fetched lines of reasoning point is simple and harmless enough: that in the battle with nature the interest of the race is one and identical, and that the community loses, while individuals cannot gain, when men, instead of uniting against the common foe, waste their strength in empty rivalry or the vain endeavour to get the better of each other. Men thought it was possible to overreach their neighbours, but this was an "erreur de compte," a simple miscalculation, though it reduced society to a state of things "où la production, enfin, était servitude, et l'échange escroquerie mutuelle." He ends by showing that when every one is bent on exacting the most he may and on giving the least he must, the *friction* of society in its contracts and exchanges will cause a positive fractional loss on every undertaking, resulting in a sensible deficit in the common wealth. Political economists may object that the friction is moral, and does not affect production, but this "erreur de compte" is amiable, especially as coming from an ex-operative, whose *livret* was full of favourable testimonials.

Proudhon's second considerable work, "Système des Contradictions Economiques, ou Philosophie de la Misère," is indispensable for the history of his opinions, but might be spared without much loss to his reputation or influence as a writer. In 1844-6 he believed himself to be accomplishing for France the work which his German friends assured him Hegel—continued by Strauss and Feuerbach—had done for Germany. A sprightly young German atheist who had come to Paris to interview and evangelize the French socialists, concluded a lecture on the neo-Hegelian philosophy "Donc l'anthropologie, c'est la métaphysique en action." "Et moi," said Proudhon, "je vais démontrer que l'économie politique, c'est la métaphysique en action." But as his political economy was ready made and circumstantial, while his metaphysics had to be evolved from conscientiously scanty premises, it was not always easy to connect his particular conclusions with the *a priori* truth of which they were supposed to be the counterpart. His "Contradictions" are a mixture of Kant's antinomies, Hegel's *Gegensatz*, and his own rooted conviction that every thing has a wrong and a right side. Besides the fundamental antagonism between man and nature, he dwells on the tendency of all things to decay as a step towards renewal. Religion is purified and elevated by the liberty of thought and criticism which finally destroys it; in the state, the principle of authority is undermined by the attempt to give it an unassailable foundation in the supremacy of the people, for the people; to be supreme,

must be free as well as absolute, which is the real meaning of his third paradox: "the true form of government is anarchy." Elsewhere he declares the government of man by man to be slavery, and it seems to have had a narrow escape of a still harder name: "Cannibalism still subsists amongst us: witness the Eucharistic sacrament and the Code Penal!" A government is by nature the "scourge of God," and he was accused, not without some reason, of trying to square the political circle, when he continued to preach revolution after explaining that the only durable revolution is one in which the masses do not become the government, and the government does not become revolutionary. He looked upon revolution as an organic process, while every government is by the nature of the case mechanical and executive; the social revolution would be accomplished whenever society had changed its mind, and the political revolution would be ripe when the people had learnt to prefer the blessings of anarchy to the delusive glories of self-government. With the same inconvenient logic, he opposed the *droit au travail* as wrong in principle, because a right against the state or the moneyed classes implied that both institutions were legitimate; while he consented to its recognition in practice as sure to be fatal, first to property and then of course to itself. In 1848 such a man could do little but, as Proudhon did, keep his hands clean, and get sent to prison as soon as possible for an attack on the coming tyrant. Without being in the least *doctrinaire*, he was too scrupulous and too logical to be a successful man of action, and on looking back he admitted as much with the melancholy impartiality peculiar to him. "J'ai appris à mes dépens qu'aux instants mêmes où je me croyais le plus libre, je n'étais encore dans le torrent des passions politiques auquel je prétendais faire obstacle, qu'un instrument de cette inintelligible Providence que je nie, que je récusé."

In 1856-7 when Proudhon was preparing his book "*La Justice dans la Révolution et dans l'Eglise*," for which he was sentenced to three years' imprisonment, he had several conversations with Sainte Beuve about the literature of the day, and the latter endeavoured, he thought at the time with some success, to bring the reformer to a more lenient view of its most eminent representatives, notably George Sand. He was soon undeceived. Proudhon was almost a fanatic in what regarded morality. The idea of duty was essential to his political theories, and if the claims of art were once admitted to compete with the claims of morality, what would become of the *point d'appui* for his economical reforms? Other more legitimate considerations had their weight as well. Sainte Beuve quotes a letter written in 1840, in which he develops in his paradoxical fashion the opinion of Fontanes, "*tous les vers sont faits*": all the correct verses that are not stupid have been written, and he was not disposed to tolerate incorrectness merely for the sake of change or in the name of liberty; art, too, had its duties, and his heresy, according to modern notions, was in supposing that its duties were ascertainable by reason, instead of by the æsthetic intuition which, on his own confession (*Du Principe de l'Art*), he lacked. Yet, it is Sainte Beuve who says so, "Proudhon eut été un fort bon et même un fin critique littéraire; il en avait l'étoffe"; and one has only to remember Lessing to know how large a share pure intellect may have in the highest class of criticism. Some of his judgments are fair, and neatly expressed. Lamartine was incapable of intellectual achievements; his *Méditations Poétiques* purely negative, a lamentation over the end of the ages of faith: "*pas ce côté funéraire ce poème se rattache à la révolution; aussi le succès fut grand et mérité*;" but this vein exhausted, the poet seems to him a "littérateur déshérité"; and of Victor Hugo, who, while hunting

subjects in mediæval Catholicism or the Mahometan East, does not see the revolution couching at his feet, he asks, "*n'est ce pas aussi un poète déshérité?*" Of course now Victor Hugo's name suggests the further doubt whether Proudhon was right in thinking the revolutionary idea a sufficient inheritance for art; his criticism remains negative, like the "idea" of the romantic literature he denounces, for though it were granted that the highest art always expresses sound moral ideas, he never defined what other elements were necessary to its existence. "Toute cette littérature érotique" seemed to him trivial as well as inartistic, and he would not admit that any treatment could make the loves of *Indiana* or *Feanne* as fit a subject for art as the old-fashioned conflict between love and duty typified in *Chimène*. But then, unfortunately, as his own remarks on *Facelyn* prove, men's notions of duty fluctuate, and a sacrifice that is tragical to one generation is grotesque, nay, immoral, to another. The ideal of beauty may not, perhaps, be naturally more stable than that of virtue, but he does it less than justice by making it dependent on another variable quantity, because to him it appeared naturally and necessarily secondary. This is the only way of accounting for the fact that after declining to distinguish between the matter and the form in the works of such artists as George Sand and Victor Hugo, after all his tirades against licentious idealism, he ended as an apologist of the "realist" Courbet. In his secret mind he seems to have thought that Courbet's pictures were too ugly to be seductive, and accordingly he interpreted their cynicism as a backhanded tribute to the beauty of virtue. There is much clever writing and some good art-criticism in the work, one of his last, and published posthumously—which contains this curious corollary of æsthetic puritanism.

If authors had been influential enough as a class to be worth outraging, Proudhon would probably have enlivened his book *Les Majorats Littéraires* with a *sous-titre*, "Copyright is simony." Ignoring the existence of publishers, he treated the question as one between men of genius, the discoverers of truth, and the general public, which he held to be capable of apprehending all truths when fitly set before it. Works of genius being priceless, it was absurd to attempt to estimate their money value, and besides, in a "mutualist" society all kinds of work will be paid on the same scale; meanwhile, he argued, it was impossible that the same thing should be sold twice, and an intellectual creation ceases to be the exclusive property of the original owner when it has once been—for a consideration—given to the outside world. To know a thing is to have all the possession possible of its truth, and whoever has learnt it owns it as much as the first discoverer, or indeed, if he can apply his knowledge, even more. Proudhon in his zeal for equality would sometimes go so far as to denounce the tyranny of talent; a dead level of educated mediocrity did not terrify him in imagination, and he had an optimistic theory that the different capacities in society are proportioned to its wants—that one Newton is enough for many centuries, and that Newtons will certainly not be made rarer by anything that makes astronomical text-books cheap. To console the authors for any pecuniary loss his plan would inflict on them, he magnifies their office to hearts content, and suggests the example of Mahomet, who, though by no means exempt from literary vanity, derived no pecuniary profit from the Koran. In the discussions which gave rise to the *brochure* it is noticeable that Sainte Beuve was also on the side opposed to privilege.

It is to be hoped that the suggestion of his biographer will be acted on, and Proudhon's complete correspondence published whenever it can be done without offence; but we

shall still have to regret the incompleteness of the little work which has shown us two able men in a somewhat new light equally advantageous to both.

H. LAWRENNY.

Parables and Tales. By T. Gordon Hake. Chapman and Hall, London. 1872.

DR. HAKE has re-issued the four parables which were generally regarded as the most telling and taking portion of his former volume, which was published a year or two ago, and received, we fear, more recognition from the press than from the public, together with four new poems, of which the last is a parable. Of the four parables which appeared before the *Academy* has spoken already. "Old Souls" and the "Lily of the Valley" are reprinted either without alteration or with alterations purely verbal; they stand still to all intents as they stood in the *World's Epitaph*, which was issued for private circulation in 1866. "Deadly Nightshade" was altered for the worse before publication; and though it has been elaborately retouched for the present edition, we hardly think it has been improved. In its original form the versification was no doubt perceptibly rough and bald, and even now it has not been raised to the same high level of simple elegance as is maintained in three at least of the new poems; still, superficially, something has no doubt been gained. But the great merit of the poem as it stood in 1866 was its faithful actuality, and this has only been impaired by successive efforts at simplification and emphasis. The misery of the mother and child was more effective when we were told that it was farmed by the lodging-house keeper; and we miss the redeeming trait that from the first she gave the baby its share of the gin. Both these changes were made when the poem was first published in the volume which contained "Madeleine," since then one or two vigorous lines have been pruned away, and two weak stanzas have been added, which may be sufficiently appreciated by the first line of each—"Oh what a theme in evil dwells;" and "A theme more sad in evil dwells." The fourth parable, now called the "Poet"—in its two previous shapes the title was "Immortality"—has been recast still more thoroughly, and here, though doubtfully, we are inclined to think that the changes have been improvements. In its original form the poem was very touching; viewed as the almost undisguised confidence of the author, it expressed all the pathos of the situation of a man who, with the highest aspirations, and with lofty powers both of thought and imagination, finds that he is growing old without having made his mark. The confidence was touching because it was naive; but confidence on such a subject can hardly be naive without being querulous. In its new form the poem is more impersonal, more manly; the arrogance gains dignity by the suppression of complaint, and there is an artistic gain in the picture of the poet's communion with nature which first feeds his aspirations and then stimulates his unrest, and in the sudden revulsion to home which precedes the final solution.

Of the new poems two can hardly be said to have a definite subject. In one the author describes the daily life of a cripple who had to go to the workhouse when his mother died; in the other he describes one of the walks a blind boy used to take with his sister, making her describe everything that she saw. There is a short but complete story in "Mother and Child." A young lady leaving the opera with her lover sees a destitute mother and child crouching under the colonnade; she is haunted by the face of the child, but her lover's image takes its place, and she does not carry out her purpose of searching for them for several days. She finds

them in church, however, before it is too late, is fascinated by the beauty of the baby, detects its resemblance to her lover, and learns that the mother has been discarded for her own sake; whereupon she breaks off the marriage, and adopts the baby. "Old Morality" is perhaps the least satisfactory thing in the book. The versification halts more than elsewhere, and the story is rather obscure and not particularly interesting. So far as we can make it out it appears to be as follows:—A sexton is digging a grave for a popular and estimable squire; while he is thus engaged Old Morality comes up *incognito* and asks for his own epitaph, which naturally the sexton cannot show him. "The righteous perisheth, and no man layeth it to heart," is really more impressive as well as more intelligible.

Taking the volume as a whole it is much more satisfactory than anything the author has previously published, and we shall be curious to watch its reception by the public, though its reception will not affect our opinion of its value. Popularity is only one element in the success of a painter; it is to be regretted that it still should be almost the only element in the success of the poet. The explanation of course is simple; to say nothing of the fact that a picture only has to be sold once, it takes longer to read a poem than to look at a picture, and it is harder to recognize good work in a poem than that we do not care to read twice than in a picture that we do not care to see often. Whether people care about it or not, Dr. Hake's work is certainly very good. To illustrate again from the plastic arts, we should say that he combines at his best the feeling of Flaxman or Blake in his simpler designs with the clear, sober daylight pleasantness, the plain finish, the pathetic repose of good Dutch painting. It would be natural in some respects to compare him to Wordsworth; but Wordsworth, even when he is most deliberately homely, is more spiritual, less concrete. Wordsworth only gives us human nature as it existed among the hills and lakes of Cumberland, and in the few and early poems, where he tries to bring out the pathos of a town subject, he always conceives it with a perceptible something of rustic surprise. Perhaps it is another side of the same tendency that Wordsworth always treats common things as if they were uncommon, whereas Dr. Hake rather insists upon their commonness as a new element of their significance. Then again Wordsworth's mysticism is given off, so to speak, by a rational philosophy, which can be stated separately; Dr. Hake's mysticism is a substitute for articulate thought, and in this reminds us of Blake. Of course the mysticism of Blake is far subtler, richer, deeper, as well as wilder, but the advantage is not all on his side; there is something infantile and fragmentary about Blake's best poems; while if Dr. Hake's inspiration is more diluted, its expression is always—at least in this volume—mature and complete. Still it would be interesting to know how far the rediscovery of Blake helped Dr. Hake to form his style and obtain full possession of his talent. Blake's influence, if it existed, would certainly be a natural and sufficient explanation of the transition to the manner of *Parables and Tales* from the manner of *Poetic Lucubrations* which the same author published in 1828, with a doubtful prophecy that "the world would find" them "after many days." *Poetic Lucubrations* have a certain sincerity and depth; otherwise they produce the effect of a crabbed and unmusical continuation of Campbell, with a sort of uneasy craving to be wild and volcanic without quite knowing how.

It is obvious from what we have said of the level excellence of Dr. Hake's best poems that extracts do him less than justice; we quote the three prettiest stanzas from the "Cripple," with the warning that they are far more valuable in their place:—

"A sheep-worn walk along the brook
The cripple loved to trace; the gush
Of water thrall'd him as it shook
The ragged roots of the green rush,
Which, with its triple flowers of pink,
Stood ripe for gathering at the brink.

"The heather bristles round the knoll,
Where inlaid moss and leaflets blend:
'Tis there he sits and ends his stroll,
His crutch beside him as his friend,
And looks upon the other bank,
Where blue forget-me-not grows rank;

"Where purple loosestrife paints the sedge;—
Where bryony and yellow bine,
Locked in blush-bramble, climb the hedge,
And white convolvulus enshrine,
Nestled in leaves, they all appear
Each other's flowers to nurse and rear."

There are eight illustrations besides the frontispiece by Mr. Arthur Hughes. None are wanting in grace and feeling. In the frontispiece and one or two others we seemed to trace an excess of childlike sweetness, and even a defect of manly knowledge. The starving child in the illustration to "Deadly Nightshade" is very pathetic, but the smug tradesmen in the background are a little too fit for a picture-alphabet of the very highest order. On the other hand, both the tinker and the tipsy watchman in the illustration to "Old Souls" are thoroughly good, they have exactly the combination of quaintness and power which suits the poem. There is so much grandiose in the cowering mother in the illustration to "Mother and Child"; and the stooping figure of Time is certainly impressive, though it is difficult to make out what the radiant boy seated by the bier has to do with the dead poet, and impossible to make out what Time is kissing, or how to complete the figure which seems to lie under the half-lifted pall. The elaborate cover combines a great deal of ingenious symbolism with a general effect both rich and pleasing; perhaps it is too realistic, the details strike us as too emphatic to be delicate.

G. A. SIMCOX.

Hannibal: An Historical Drama. By John Nichol, B.A., Oxford. Maclehose and Co., Glasgow. 1873.

It is difficult to know by what standard an historical drama ought to be tried, for history is not fruitful in really dramatic actions or catastrophes, and the historical dramatist has to compromise as he can with his story and his characters, and look for ideal completeness of effect rather than to the general tone of the scenes he selects from history than to any high organic unity which it is possible to establish between them. Certainly Mr. Nichol has maintained a very high level both of elevation and energy through a play that is longer than any of Shakespeare's historical tragedies. His characters talk very vigorously, as well as very cleverly, it never occurs to us that the conversation stands still to give them time to be clever; though there are one or two long descriptive speeches, like that of Sosilus on the march of Hannibal's army through the Pyrenees, and that of Hannibal on the view of Rome, which seem as if they would be more in place in a drama constructed rather on the Greek, than on the Elizabethan model. This is not the only incongruity. Mr. Nichol is known as one of the most distinguished advocates of women's rights; but we doubt whether his clients will thank him for having shown his irrepressible interest in such questions by going out of his way to introduce a *femmelibre* in the person of Fulvia, the daughter of a Roman consul, who leaves everything to be the mistress of Hannibal, and takes the place of Calavia, a daughter of a Campanian senator, who prefers to cheat

her own lover and save her father by marrying Otacilius (whose name is spelt Otalicius throughout the play). After all, Fulvia is a puppet, like Imilce, an imaginary Spanish wife of Hannibal, and though she is more theatrically effective, the effect, such as it is, seems hardly worth purchasing at the expense of such a flagrant anachronism. Of course the ideal purpose of both episodes is to bring out Mr. Nichol's conception of the character of Hannibal, but this is hardly a sufficient justification. In fact, it would have been better to have been satisfied with presenting the great deeds of his hero, without trying to invent a great ideal for him on purpose to make him realize it. Hannibal's heroism, we suspect, was mainly of the silent order: he did not make fine speeches about his mission, or nurse fine feelings about it; he was simply a great *condottiere* at feud with Rome. The greatness he displayed during his long and, upon the whole, successful career, was of a kind to which history can do more justice than fiction. He is only lowered by scenes where he is represented as disguising himself as a spy to see if the guards can be trusted to arrest him, or as giving Mutines a dagger to perform the Happy Despatch. The climax to the play, where Hannibal swears to perform his vow to the uttermost in spite of the death of Hasdrubal, reminds us of a tragedy of Mason's, where the play goes on long after the action is over in order that the heroine may vow with adequate solemnity not to marry again. It is true that Mr. Mason had the excuse of imitating the Greeks. But we do not wish our last word to be of censure. After all, Hannibal is a very spirited and very creditable performance: if Mr. Nichol's great command of the eloquence of dramatic poetry were to be employed on a subject of more concentrated interest he might produce an admirable and lasting work.

G. A. SIMCOX.

Histoire générale de la Musique. Depuis les temps les plus anciens jusqu'à nos jours. Tome IIIme. Par F. Fétis. Paris. 1872.

In this volume, which treats of the music of ancient Greece and Italy, M. Fétis labours under the serious drawback of very imperfect knowledge of the Greek language. On p. 45 he writes the word *συνεμμενον* ("conjoint," a kind of tetra-chord) *synemenon*, adding in a note, "du verbe *συνεμμι*, aller ensemble." This ignorance leads him into more than one doubtful speculation. For instance, he finds in Aristides Quintilianus a table of an ancient scale ("ancient" to a writer of the first century, A.D.) containing two octaves, the lower of which is divided into quarter-tones, the upper into semi-tones. The notes (of which a facsimile is given on p. 29) are corrupt in all the MSS.: it is plain, however, that they are those of the ordinary Greek notation. Above each is marked the number of quarter-tones (or dieses), counting from the lower end of the scale, and these numbers, which are given in the usual way, by the letters of the alphabet, are mistaken by M. Fétis for an archaic musical notation of wonderful symmetry and perfection. Some interesting but (we fear) fallacious conclusions are based upon the discovery. Again, in the chapter on the Melopœa of the Greeks, M. Fétis has given from Aristoxenus (pp. 204-207) a number of rules which refer to the succession of intervals in a musical scale, but which he takes to refer to the structure of every melody. Naturally he finds that they are "étrangères à l'objet réel de la musique," that they "tombent souvent à faux," that the ancient writers were not true musicians, &c. On the question whether the Greeks were acquainted with harmony (in the modern sense), he has a long but quite inconclusive chapter. The subject is one in which accurate interpretation is peculiarly needed. Yet there is much in the volume which shows both knowledge and ability. The

information given on the subject of the ancient musical instruments must have cost no inconsiderable labour to collect. It is greatly to be regretted that M. Fétis should have undertaken a task for which accurate philological training is an indispensable condition. As it is he has produced a work of misdirected ability, useful possibly as a quarry of materials, but wholly unfitted to hold the place of a standard work.

D. B. MONRO.

NOTES ON LITERATURE AND ART.

A new fortnightly review, on the model of the Parisian *Revue Critique*, has been lately founded in Portugal, under the title *Bibliographia Critica da Historia e Litteratura*. The editor, S. A. Coelho, proposes to try the current literature of his own country by the strictest cosmopolitan standards, and to recommend by example and precept the results and methods of modern science and research.

The *Revue des deux Mondes* seems at last to have recovered from the disturbance in its usual placid habits produced by the war. The number for February 1 contains, besides other readable articles, part of a novel ("Méta Holdernis") in M. Victor Cherbuliez's liveliest manner; an account of the popular poetry of Central Asia, by Mme. Dora D'Istria; an unintelligent review of "Middlemarch," by M. Bentzon; M. Guizot *apropos of Madame Récamier et ses amis*; and a notice of M. A. de Candolle's *Histoire des Sciences et des Savans depuis deux Siècles*; a work on the plan of Mr. Galton's "Hereditary Genius," containing some fresh and interesting statistics.

Recent excavations in the *Vigna Casali* on the Appian road have disclosed an interesting family sepulchre, apparently of the age of Septimius Severus, with painted walls and sarcophagi covered with mythological subjects, all in a fine state of preservation.

Macmillan (January) contains an interesting paper by Mr. Spalding, on "Instinct," studied chiefly in chickens and other domestic birds, and pointing to the conclusion that Mr. Herbert Spencer's theory of inherited experience meets all the facts of the case, except the popular belief, which it is hard to justify, that instinct has something peculiarly mysterious about it.

The *North American Review* (January) has an article on "Bjornson as a Dramatist," apparently written by a fellow-countryman, which may be recommended to English readers, whose knowledge of Norwegian literature is likely for some time to come to be at best second-hand.

The most brilliant event in Danish literary society this winter has been the production of Herr Ernst von der Recke's clever drama of "Bertran de Born" at the Royal Theatre of Copenhagen. The young poet has achieved great success not only on the boards, but also before the reading public.

Frederick Christian Sibbern, the most eminent of Scandinavian psychologists, has lately died at Copenhagen, in his 88th year.

Buda Pest Review (*Budapesti Szemle*) for January and February, 1873, begins a new series. Edited by M. Paul Gyulay (Pest Ráth). The first article in this number is from the pen of M. Salamon. It is a plea for a freer artistic and scientific handling of the existing materials of Hungarian history.

An article in the same by M. Imre on the neologisms introduced into the Hungarian language during the last hundred years, and on the errors committed in the process of innovation, points out the immense extent of the changes made, far surpassing anything of the like kind in Latin or the modern languages of Western Europe. The article is but the first instalment of a work, to which the Hungarian Academy awarded the Marczibányi prize for 1871-72.

M. Pulszky contributes to the same an account of the engraver Marc Antonio Raimundi and his school, followed by a catalogue of the 180 specimens of his work at the National Museum, of which M. Pulszky is director. We have, besides, the first part of an article entitled "Some Glances at the Progress of Natural Science," commenting on Dr. Carpenter's address to the British Association; a chapter from Vambery's *History of Bokhara*—a critique of Mr. Mill's Programme of the Land Tenure Association, questioning its conclusions; the first of a series of articles by the Manager of the National Theatre on the reorganization of that—for Hungary—important institution. The editor's review of recent Hungarian novels suffers from the extreme slowness of the subject matter. The conventional modicum of poetry, original and translated, and of fiction, with short critical notices of pictures and books, completes the number, which shows almost throughout the influence of English thought and models. Thus we have a translation of the *Saturday Review's* critique of Thomas Maitland or Mr. Buchanan's notorious article.

Some amusing parodies, which originally appeared in an American magazine, have been reprinted by Mr. Hotten, we hope with the sanction of the authors, under the title of *Diversions of the Echo Club*. The writers have not taken individual poems to burlesque, but have tried to compose semi-seriously in the manner of their models; there are no less than four imitations of Browning, all more than tolerable, a very good one of Tennyson's more prosaic idylls, one still better of Poe, on the promissory note for fifty dollars he gave to Greeley, who offered to sell the only autograph of the poet he possessed half-price. Longfellow is well done; so also, so far as we can judge, some other American poets less familiar to an European public. The authors succeed better with their own latest school—Bret Harte, Hay, Whitman, and Joaquin Miller—than with our latest, Swinburne, Morris, and D. G. Rossetti; the imitation of the last is made unrecognizable by the intrusion of weak and obvious criticism.

Gustave Ricard, one of the most distinguished of French portrait painters of the present day, died suddenly at Paris, on Friday, January 24th, at the early age of 49. M. Ricard was born at Marseilles in 1824, and made his first studies in his native town; then he established himself in Paris, and exhibited in the Salon of 1850 a head of a "Young Gipsy Girl," which attracted the attention of both artists and amateurs by the largeness of character and distinction of style which stamped it as the work of a genuine and penetrating artist. In 1852 he obtained the first medal, and in 1853 he produced his fine portrait of Wilhelmine Clauss, and the portrait of Dr. Philips. In 1855 he exhibited nine portraits and a portrait study. At the Universal Exhibition the special public of artists and connoisseurs found him justifying their high expectations, but he only received from the jury an "honourable mention." In 1857 and in 1859 he still continued to exhibit, sending successively a large number of portraits, of which many have become celebrated in the world of art. Up to this moment Ricard's works were familiar to every frequenter of the Salons; but now satisfied with the position which he had achieved, and irrevocably classed beyond and above the common line, Ricard retired wholly from public exhibitions, only reappearing last year with a portrait of M. Paul de Musset. In Germany his works were well known and highly valued, and quite recently he made a stay in this country, painting several persons more or less known in London society. M. Ricard's powers were not, however, solely devoted to portraiture; he executed for the hotel of M. Paul Demidoff a considerable decorative work of a high order of merit, and was also the author of several decorative panels for M. Lavallée. In these works, as in his portraits, M. Ricard showed the same distinguishing qualities, the same poetry of line, the same profound sobriety which gave strength and beauty to his portraits. Amongst those which have obtained the most marked success we may add to the three above mentioned his portraits of M. Anatole de la Forge, Mme. de Calonne, Mme. Sabatier, M. Arlès Dufour, M. Chenavard. It was on this last mentioned portrait that M. Ricard was engaged but a few hours before the sudden death which snatched him from the many attached

friends who held him dear, and from the assured and successful future which lay before him. We learn from the *Chronique des Arts*, to which we are indebted for much of the above, that M. Ricard was intending to make a serious and considerable exhibition of his works at Vienna, and it is to be hoped that his friends will carry out in his honour those intentions which he has left unfulfilled; such an exhibition would be of the utmost value in helping us to appreciate the true quality and rank of an artist whose refinement of character, width of view, and cultivation of mind stamped everything which he did. The *Figaro* for January 30th contains a careful article on M. Ricard by M. Albert Wolff, and the *Gazette des Beaux-Arts* promises us a full and carefully-considered notice.

The *Gazette des Beaux-Arts* for February 1 commences with the concluding article on "Les Estampes des peintres graveurs," by M. Henri Delaborde. M. Louis Courajod contributes a first article on the writing and ornamentation of the charters and diplomas in the Museum of the National Archives. M. Saint Cyr de Rayssac continues his notice of the correspondence of Henri Regnault, edited by Arthur Duparc. M. Louis Ménard gives us a study on the Graces as symbol of the social tie. M. René Ménard writes a brilliant superficial article on Portraits in the English School, which resolves itself into a discriminating criticism of Sir Joshua, Gainsborough, and Lawrence, which is however just, as far as it goes. M. Alfred Michiels continues his investigations into the origin of the German school of painting. M. Alfred Darcel, the director of the *Gobelins*, contributes a second article on the archæological movement inasmuch as it concerns the middle ages. The number is accompanied by a vigorous etching by M. Rajon after Gainsborough's portrait of Mrs. Siddons. It is a forcible, spirited, attractive piece of work of thoroughly artistic quality, only it is the quality of M. Rajon, not of Gainsborough. The vivid, sharp, acute transitions of tone do not stand in any appreciable relation to the suave refinement, and naive, sweet, harmonious quickness of the original. One might fitly say of M. Rajon's translation from Gainsborough as was said of Morghen's rendering of Leonardo's Last Supper, "*si belle de burin si fausse de caractère.*"

M. Le Gros, who is now in Rome, has left behind him a painting which will worthily represent his powers in the forthcoming exhibition of the Royal Academy. At Boulogne yearly takes place the pathetic ceremony of blessing the waters when the fishing fleet set out on their hazardous voyage. This ceremony forms the subject of the picture; the moment chosen is that when the priestly procession has approached the brink of the sea and the benediction is actually being bestowed. But the interest of the painting does not centre on this group, which is indeed seen but in the distance forming only the continuation of the snake-like curve of the composition, conducting the eye to the centre point of bright, fathomless, sun-lit sea, and there ending, just as the massive rocks on the opposite side of the composition form the solid base and point of departure. The interest of the whole centres in the two groups subtly detached from each other, and so made to carry on the circular wave of line up to the procession, which finally diverts it to the sea. These groups are composed of the wives and mothers who are praying and hoping on shore. The right-hand group face the spectator, then occurs the break, and the remainder kneel, turning their faces to the waters. But this finely felt and masterly composition is not the only charm of M. Le Gros' powerful work. The draperies are faultlessly excellent and severe, and the hands are drawn with admirable precision and sense of character; it is not until we dwell on the faces that any suggestion of adverse criticism arises in our minds. Here we feel a want of transparency, which destroys the flesh tint and conveys even into the beautiful group of the young mother and child a dash of unreality. And surely M. Le Gros, who can give us such strong, full, manly work, can give us this, so that when we see draperies and hands which stand forth in life, in character, in sobriety as grand as Holbein, we may not feel shy of lifting our eyes for fear of missing in the heads that vitality which informs every other portion of the picture. We understand that this admirable work is the property of Mrs. Eustace Smith.

M. Rudolf Lehmann has just completed a portrait of Helen Faucit (Mrs. Theodore Martin), which is in course of being

engraved by M. F. Joubert, a pupil of Messrs. Dupont and Ingres. The celebrated actress is represented standing in a balcony; she is wrapt in a white burnous (with shining and dull stripes alternating); her left arm is leaning on the balcony, the right hand holds up the folds which nearly cover the whole figure, so that only a small bit of the blue dress which it conceals is seen. Laurel-trees are in the background, and in front some oleander flowers and leaves hide part of the balcony. The picture has given great satisfaction to private friends, which augurs well for its reception by the public. M. Lehmann has also recently painted the portrait of Mr. Morgan, the well-known American banker, partner of the late Mr. Peabody, and is at present engaged on a considerable work representing the Ratification of a Concession granted by the Shah of Persia to Baron Julius de Reuter.

From time to time the leading continental engravers undertake some *chef d'œuvre* of one or other of the great Italian masters, completing in the course of years, as they may be able to apply themselves to the task, a perfect work of reproduction in their own art. Müller, Forster, Keller, and now Blanchard, have done this; the latter having just completed one of the most lovely pieces of modern line engraving of the picture by Francia of the *Virgin and Two Angels weeping over the dead Christ*. This picture, which was painted about 1495 for the Buonvisi chapel in the church of S. Frediano at Lucca, was the lunette of the altar-piece, and has always been considered one of the typical examples, as it is one of the most pathetic in sentiment, of the art called by some Italian writers *antico-moderno*, that is to say, the art just before the cinquecento, when naturalism and the classics combined to make the graces of style and execution supersede every higher motive recognized in the previous age.

With us, we are sorry to say, engraving of this kind has almost become extinct, and on this account, as well as on its own merits, this print deserves particular mention. The thorough study of a notable picture such as this, by an able artist engraving it, is itself sometimes of great importance. Two years ago or so a line engraving of similar dimensions appeared by Keller of the Sistine Madonna at Dresden, on the upper rim of which appears for the first time the rod passing from side to side of the picture on which the curtain hangs. This curtain, it will be remembered, in all previous engravings appeared on either side of the background of angels' heads as if it came simply from the top edge of the painting, whereas it was ascertained, on that great work of Raphael being taken from its frame, that several inches of the painted surface containing the rod on which the curtain hangs in front of the luminous background had been turned over and concealed by the frame. This of course was an accidental result, but the completion of elaborate line engravings such as these must be considered of the highest advantage to public taste, and the best monument to the master. We have examined this print by Blanchard after the Pietà of Francia with care, and find it worthy of being placed among the finest works of modern times. This engraver, it will be recollected, did Holman Hunt's Christ in the Temple, and in our opinion rendered it a little thin in texture, but here we see nothing of that defect; the tones of all the draperies are particularly full, and the faces of the angels rich in execution, expressing with great charm the redness of weeping and the pathos of the original. Blanchard is now employed on Alma Tadema's Vintage.

New Publications.

- ARNOLD, Matthew. Literature and Dogma. Smith, Elder, & Co.
 DASENT, G. W. Jest and Earnest. Chapman & Hall.
 LEONOWENS, A. H. Romance of Siamese Harem Life. Trübner & Co.
 MAYO. Never Again. Sampson Low & Co.
 MILLER, Christine. Burgomaster's Family. Translated by Sir J. S. Lefevre. Longmans.
 OWEN, H. (F.S.A.). Two Centuries of Ceramic Art in Bristol. Bell & Daldy.
 THACKERAY, Miss. Old Kensington. Smith, Elder, & Co.
 TROLLOPE, Anthony. Australia and New Zealand. Chapman and Hall.

Physical Science.

English Botany. Edited by J. T. Boswell Syme. 3rd edition. Vols. I.—XI. Hardwicke. 1863-1872.

THE first edition of *English Botany* appeared during the interval between 1790 and 1814, and reached when completed thirty-six volumes. Sir J. E. Smith wrote the descriptions, and the drawings were made under his supervision by James Sowerby. They were published as the plants they were made from came to hand, and consequently in no systematic order, and cryptogamic as well as flowering plants were included. Each plate was coloured by hand, and gave so much of the plant drawn from as could be represented without reduction within the compass of an octavo page. No doubt the folio size adopted by Curtis for his *Flora Londinensis*, which was by no means by the way restricted to the plants of the London district, was in many respects more satisfactory. But that work will probably always remain a fragment, while *English Botany*, if less ambitious in form, has accomplished the complete illustration of all the flowering plants indigenous to the British Isles.

The second edition was merely a reprint. The third, which is the subject of the present notice, is, except for the use made of a large number of Sowerby's old figures, an entirely new work. Contrary to what is often the case with illustrated books, it certainly owes its importance in great measure to the descriptive text. The first of the eleven published volumes appeared ten years ago, and, besides the general editing, the elaboration of the descriptions has continuously engaged Dr. Boswell Syme's attention since that time. The result is worthy of the labour spent upon it, and leaves nothing to be desired, either as regards a careful study of the materials collected by Dr. Boswell Syme himself and communicated to him by correspondents and friends, or as regards a critical appreciation of what is to be found in foreign authorities. The use which Dr. Hooker has constantly made of these volumes in collating with them the descriptions in his *Student's Flora of the British Islands* is a sufficient proof of their value.

Without the tedious process of actual counting, there is no means of ascertaining what is the number of distinct species of indigenous flowering plants which Dr. Boswell Syme has recognized. Dr. Hooker's specific standard seems to be of about the same value, and the *Student's Flora* appears to contain 1,207 species. *English Botany* includes probably therefore about the same number, and these are illustrated by 1,824 plates. This gives an average of three plates to two species, which shows that, besides the typical and most normal form, the most prominent variety in the case of half the species has been figured as well.

It is one merit of the present edition that the series of plates has been adapted to a systematic enumeration of the species. The first edition consisted of a mere haphazard collection of illustrations, copious in some places, most defective in others. Many of these have been discarded, being often inadequate, and sometimes even erroneous, especially from the confusion of closely allied plants not critically discriminated at the time the drawings were made. For this class of plants, indeed, an immense deal had been done subsequently by the attentive study of different botanists, and the beautiful figures illustrating many of them which were made by Salter for the supplement to *English Botany* have been intercalated in the present work where they were needed. New figures have also been given, and if these compare somewhat unfavourably with the work of the older hands they still serve their purpose sufficiently. If indeed an exception be made in the case of some of Salter's best plates, the whole work might, judged by a purely artistic standard,

fall into somewhat unjust discredit. But modern botanical drawings demand a peculiar kind of conventional treatment almost diagrammatic. The careless, spontaneous attitudes of living plants are far from always bringing out discriminative details of structure with the clearness required in a technical illustration. Few botanical artists can draw plants with this end in view and yet avoid, even to a moderate extent, the hardness and primness which is often distressingly unfitting. It is often melancholy to turn, by way of contrast, to the woodcut illustrations of the old herbals, especially of the sixteenth century. Then the artist was content to render, with sometimes almost audacious conventionalization, at least in matters of size and general arrangement, the general *facies* of the plant. The result is almost always felicitous, not seldom marvellously so. There was no demand or temptation to aim at anything more; discrimination was founded on clear differences of general aspect, and the artist evidently devoted study to obtain a distinct, perhaps even a slightly exaggerated, idea of what the individual character of the plant consisted. But with the progress of observation, diagnostic structural details of a more and more recondite sort have gradually taken the place of *facies*, or habit. In bringing out these into prominence the grace which belongs to individualized living forms either evaporates or is even deliberately neglected.

It would be impossible to discuss in this article in any adequate fashion the numerous matters of technical interest which suggest themselves in turning over Dr. Boswell Syme's pages. The only want which is not satisfied is the geographical distribution. There can be no doubt that the facts about our indigenous plants have never been set forth before with such completeness and accuracy. Indeed as regards all details of structure which are not merely histological this chapter of scientific work may be regarded as practically closed. At any rate, Dr. Boswell Syme's volumes are likely to be held authorities for the next century.

It is very desirable that the flora of a country should be regarded as an instrument of national education. Every naturalist worth anything at all has passed through the phase of ardent collecting. Apart from the various kinds of mental and physical enjoyment which grow out of it as a recreation, there is no other training which so well brings to the mind keenness of observation, and the power of seizing and weighing objective distinctions. It would therefore be well worth the attention of an intelligent government to preserve spots of primitive land-surface of which the vegetation was especially interesting. Some of these already owe their preservation to the protection given to game. But under these circumstances botanizing is apt to be confounded with poaching. In the future it may be hoped that a botanist studying the surviving remnants of an ancient vegetation on some one of our mountain tops may do so with all the sanction which a visit deserves to a monument, if one may so call it, of our early physical history.

At the close of the pliocene period northern Europe, including the greater portion of the British Isles, which were then connected with the continent, was covered with a continuous sheet of ice. If any fragments of an arctic vegetation held possession of spots which the ice left uninvaded, even these would be destroyed by the subsequent gradual submergence beneath the sea, which left nothing but the mountain tops exposed. The British Isles were therefore, as regards terrestrial vegetation at this period, a complete *tabula rasa*. As their surface gradually emerged, it would be stocked with animal and vegetable life from the adjoining continent, with which there is reason to suppose it was again continuous. The climate, which had been milder during the period of submersion, now again became cold; the moun-

tains were once more clothed with glaciers, though not so extensive or so confluent as before. The vegetation must have been therefore at first of the character we now know as arctic, and this would give place, as the climate ameliorated, to new northward-spreading waves of vegetation. Mountain summits in Britain, as elsewhere, preserve some fragments of this old flora, which on the continent has shrunk away towards arctic and alpine Scandinavia, and is perhaps still retreating. The Scotch fir (*Pinus sylvestris*) found in the bogs of Ireland, and at the bottom of those of Denmark, has retreated also; in Denmark it is no longer indigenous, and as a native tree survives doubtfully with ourselves. Gradually the plants of east Europe spread towards Scandinavia and the British area, to be followed in turn by a wave from the south, to which period the beech belongs. At the same time Ireland and south-western England received contributions from the western flora of Europe. The native plants of Ireland number only two-thirds of those found in Great Britain. This is at once explicable if the latter area was nearer to the common source of origin. Nor is this all: of 120 plants which are characteristically eastern as regards the British Isles only 18 reach Ireland, and but five extend to its western side. The distribution of reptiles furnishes facts with a precisely similar bearing.*

The British flora is therefore simply an extension of the continental flora, with which it is no longer continuous in area. A question of great biological interest at once arises: What amount of change or differentiation can be detected in the severed portions of what was once a common flora? An elaborate descriptive work like the present ought to supply, as to some extent it no doubt does, the material for making the comparison. It must, however, be remembered that British botanists have tried hitherto rather to identify their "critical" plants with those of the continent than to discriminate them.

In the first place, there is no species in the British Isles which is peculiar to them. There are consequently no such marked differences, whether accounted for by the dying out of some species on the mainland or by the differentiation of others after their migration, as exist between the vegetation of the Madeiran Archipelago and the neighbouring continents. But there is reason for believing the Madeiran vegetation, which was not however derived through land extension but by other agencies, to be as old as the miocene, and compared to this the antiquity of isolation in the case of the British Isles becomes inconsiderable.

When a flora migrates it will fail necessarily to preserve its homogeneity. To begin with, the rate of migration of individual constituents will vary very greatly: some will fall out of the march altogether, and those that transfer themselves to new localities, or are transferred, will be differently affected by the change. Some it will agree with better than it does with others, and these last will go down sooner or later in the competition. The rest may either find themselves holding much the same place in their new quarters that they did before, or they may prove to be better fitted altogether for their new conditions of life than for their old ones. The optimist view of nature is dying

out; hardly anyone believes that every living thing is in the place best suited for it.

It is quite certain that some plants transferred to a new area will evidence symptoms of constitutional in response to environmental changes. And this once set up is apt to continue till amongst the continuously-varying offspring some form makes its appearance which happens to find itself better adjusted than others to its surrounding conditions, and these in the long run it will as a consequence supplant. It results from this that even on a continent a species extended over a large area and embracing on that account diverse physical conditions, will give rise to races more and more differentiated from one another centrifugally, and at the same time blending together towards the centre. Insular position prevents this blending, and brings the differentiation consequently into sharper contrast. The amount of the contrast will clearly depend on the time that has elapsed since the separation. The British flora is as a whole only of postpliocene age, though individual specific forms are of course of far greater antiquity. But the amount of diversity from the continental flora has not yet become in any one case specific. Mr. Bentham however remarks* that the British student of brambles or roses, "transported to the south of France or to Hungary, will still find one, or perhaps two or three, forms of bramble and dog-rose with which he is familiar; but if he wishes to discriminate the thirty or forty varieties of sub-species upon which he had spent so much labour and acuteness at home, he will find that he must recommence with a series of forms and combinations of characters quite new to him. The species is still the same; the varieties are changed." To establish clearly facts of this kind shows that even what has been thought, in the case of brambles, to be a thoroughly useless study, is not after all without its biological value.

W. T. THISELTON DYER.

Notes on Scientific Work.

Geography.

The Unknown Regions of the Globe.—The unexplored regions of the world have at all times had a mysterious and enticing interest, and the desire to know what lies concealed within their borders seems at no time to have been stronger than at present. Year by year their limits are narrowing. Four vast areas which have never been traversed by civilized man stand out pre-eminently among these, and taken together constitute about a seventeenth part of the surface of the globe. Of these the greatest is in the Antarctic Region, the extent of which is about seventy-five times that of Great Britain. The second lies about the North Pole, the third is in Central Africa, and the fourth is in Western Australia. That which lies round the South Pole is almost continuous with the Antarctic circle, and can be traced out by the furthest points reached by the voyagers Cook, Bellingshausen, Weddell, Biscoe, Kemp, Balleny, d'Urville, Wilkes, Ross, and Moore from 1772 to 1845. That part of its boundary of barrier ice which lies nearest the South Pole, in lat. 78° 10' south of New Zealand, was attained by Ross in February, 1842. The unknown region of the Arctic pole is also more or less circular in form, except where it stretches southward to the vast inland-ice fields of Greenland. In the long list of "furthest points" which constitute its margin, the inroads made on the previously unknown by Gillis, Wrangell, Parry, Collinson, MacIntock, Kane, Rogers, Hayes, Payer, and Mack from 1707 till 1871 remain perhaps the most notable. No one has as yet approached nearer the North Pole than Parry, who reached the latitude of 81° 45' over ice, to northward of Spitzbergen, in July of 1827. The unexplored African area of tropical forests and great population, the most interesting of all, because it is the most promising in useful results, stretches from the furthest points explored by the Portuguese travellers of 1806, of the Hungarian Ladislaus Magyar in 1850, and of Livingstone in later years, on the south, to the points nearest the equator reached by Barth in 1855 on the north. Eastward its outline is given by points on the routes of Speke in 1862, Baker in 1864, Schweinfurth in 1870, and Livingstone in 1870-1872. On the west the limits of unknown Africa approach very closely to the coast, and, near the equator, have only been driven inland at the ex-

* Four species in the west of Ireland have been held to point to a former connexion with North America. Of these *Sisyrinchium bermudianum* has probably been introduced; *Najas flexilis* is also found in Europe and Asia. Two do not occur elsewhere in the Old World; but *Eriocaulon septangulare* is an aquatic plant, and therefore one of a kind notorious for wide distribution by the aid of migratory birds; *spiranthes romanzoviana* cannot however be explained away; perhaps, as well as *Eriocaulon*, it may be a straggling survivor of the miocene European Flora which had a strong resemblance to that now existing in North America.

* Address to Linn. Soc., 1870. p. 8.

tremities of Du Chaillu's journeys of 1865 and 1866, and by the high point on the Ogowai River attained by Walker in 1866. The settled parts of the coastland of Angola give the boundary on the south-west. If it be successful, the "Livingstone-Congo" expedition, under Lieutenant Grandy, will penetrate to the very heart of the unknown space. In Australia the great unknown desert region lies west of the track explored from south to north by Stuart in 1861-62 which now marks the line of telegraphic communication across the continent. On the south it extends almost to the steep shores of the great Australian Bight; on the north, the greatest inroad on its domain was made by A. C. Gregory in 1856; westward its outline is formed by the turning-points of the journeys made by Roe, A. C. Gregory, Austin, F. Gregory, and Forrest from 1846 to the present time. The areas of these unknown regions are approximately as follow:—

	Square miles.
South Polar Area	6,800,000
North Polar	2,900,000
Central African,	1,050,000
Australian	850,000

Chemistry.

The Oxides of Phosphorus.—A. Gauthier has communicated to the *Société Chimique (Revue Scientifique)*, 25th January, 1872, 715) the results of his researches on these substances. When phosphorous acid acts on chloride of phosphorus at 70° a yellow body is formed, which, after it has been washed with water, is found to have the formula P_4HO . At 100° it is likewise formed mixed with amorphous phosphorus; at 165° to 175° the only products are amorphous phosphorus, and pyrophosphoric acid. The substance P_4HO is a definite compound, and does not undergo decomposition when heated to 250°; at 275° it gives off phosphuretted hydrogen, and only at 360° does the disengagement of phosphorus commence. It is readily decomposed by soda. Gauthier has since found that biniodide of phosphorus when treated with a large quantity of water produces phosphorous and hypophosphorous acids, and a new body, having the formula P_4H_2O , which readily changes into phosphorous and phosphoric acids.

Hyoscyamine.—The researches of Merk point to the conclusion arrived at by other observers, that hyoscyamine is not, as has usually been stated, a crystalline body. The author (*Chem. Central-blatt*, 1873, No. 1, 3) obtained it in the form of a soft mass, which, when distilled in an atmosphere of hydrogen, forms a colourless liquid, having an odour resembling that of conine. It is readily soluble in alcohol and ether, and is taken up to a considerable amount by water. On exposure to the air it soon turns yellow and then brown, becomes viscous, and is no longer soluble in ether. It has a strong alkaline reaction, completely neutralizes acids, and forms a series of salts which are easily soluble in water and difficult to obtain in crystals. The nitrate and oxalate crystallize best.

The Flame-test for Potassium.—When testing for potassium in the presence of a large excess of a sodium compound by examining the flame of the mixture with cobalt glass, or a solution of sulphindigotic acid, the method, as is well known, fails unless the former metal be no inconsiderable constituent. If a solution of permanganate of potassium be used in place of either of these media, the sensitiveness of the test is greatly enhanced; for instance, in the flame given by a chloride of sodium which contained 0.4 per cent. of potash converted into chloride, the presence of potassium was clearly recognized. It is possible in this way to determine potassium in a mineral, though we should fail to recognize it by means of a pocket spectroscope. According to H. B. Cornwall (*American Chemist*, 2,384) it appears that a mixture in proper portion of alcoholic solutions of aniline blue and aniline violet when used in the prism will shut off the light emitted by both sodium and lithium compounds, and facilitate the detection of potassium in the presence of both metals.

New Synthesis of Anthracene.—It has been observed by W. A. Van Dorp (*Ber. Deut. Chem. Gesell.*, v. 20, 1071) that benzyltoluol, prepared by Zincke's method, and having a boiling point of 275°–280°, is decomposed when passed through a tube filled with pumice at a low red heat into a solid hydrocarbon, an oily body, and hydrogen, which escapes. The liquid substance is separated from the solid by pressure, and the latter crystallized from glacial acetic acid. The slightly yellow crystalline plates melt at 213° and have the composition $C_{14}H_{10}$. The identity of this substance with anthracene was established by confirmatory tests by treatment with picric acid, by the conversion into anthrochinone, and by the formation of alizarine by heating the anthrochinone-sulphuric acid with potash. This process of forming anthracene is to be recommended because it readily furnishes the product in a pure state. Benzyltoluol yields about 10 per cent. of anthracene. The oil, which was mentioned among the products, yields further anthracene if passed through the tube a second time. The reaction is as follows: $C_{14}H_{10} = C_{14}H_{10} + H_2$.

Epilote.—Several papers have appeared of late respecting the formula of this mineral. Rammelsberg, after an examination of numerous

analyses, maintains that it contains no water, and has a composition represented by the formula, $Si_2Al_2Ca_2O_8$; and he produces in support of this conclusion the oxygen ratios of an analysis of the beautiful crystals of epidote of Sulzbach. Tschermak, and still more recently Kenngott, on the other hand, have assigned to it the formula $Si_2Al_2Ca_2H_2O_{10}$. A very careful chemical examination has recently been made by E. Ludwig (*Mineralogische Mittheilungen*, 1872, beft 3, 187), of some large and pure crystals from the Sulzbach locality, and he finds his results agree with those of the last-mentioned observers. He regards the varieties of epidote as mixtures of the two isomorphous constituents, $Si^4Al_2Ca_2H_2O_{10}$ and $Si^4Fe_2Ca_2H_2O_{10}$.

Valeritrine.—N. Ljubawin has read a further paper on the action of alcoholic ammonia on Valerianaldehyde before the Chemical Society of St. Petersburg. (*Ber. Deut. Chem. Gesell.* v. 20, 1,101.) In addition to valeritrine there is formed a base the hydrochlorate of which crystallizes in needles, and has the formula $C_{10}H_{15}N.HCl$, or $C_{10}H_{15}N.HCl$, a clear indication that amyl alcohol took part in the formation of the new alkaloid. By the reaction a part of the aldehyde must split up into amyl alcohol and valerianic acid; this view gains support from the fact of this acid having been found among the bye-products of the action.

Mineralogical Notices.—In the *Jahrbuch für Mineralogie*, 1872, No. viii, the venerable Breithaupt has published a few notes bearing the above title. Nautokite occurs in small brilliant colourless crystals belonging to the tesseral system. It has the composition Cu_2Cl_2 . It was found in Chili, and is associated with atacamite and cuprite. Nantokite is probably isomorphous with common salt and horn silver. Winklerite is an amorphous compact mineral, having a bluish black colour and dark brown streak. It occurs at Oria, near Montiril, in the Sierra Alhamilla. It has a very complex constitution, being probably composed of carbonates of cobalt and copper, with hydrated sesquioxide of cobalt and arseniate of lime.—In part ix. of the *Jahrbuch* is published a paper on ardenite, by A. v. Lasaulx. This new mineral, which occurs near Ottrez, in Belgium, consists of fibrous aggregates of small crystals that have no terminal faces, and much resemble cyanite. The colour is brown or bright yellow, and the cleavage very marked along two directions. The crystals are dichroic. The mineral contains silicic acid, vanadic acid (about six per cent.), alumina and sesquioxide of manganese (29.4 per cent.), as well as a few per cent. of accidental ingredients.

Absorption of Chlorine by Charcoal.—M. Melsens has (*Compt. rendus*, 13th January, 93) determined the quantities of this gas taken up by varieties of charcoal, and states that one kind is able in the cold to absorb nearly its own weight of chlorine. Charcoal thus charged, when placed in contact with dry hydrogen in the dark, forms hydrochloric acid, the combination being attended by a fall of temperature. In contact with water hydrochloric acid and carbonic acid are formed. The oxygen acids of chlorine, as well as organic acids, though sought for among the products of this action, were not detected.

The Colour of Raw Silk.—The yellow colour of silk has been found by Pfeiffer (*Arch. Pharm.* [3] 1 424) to be a more or less altered chlorophyll which has been deprived of its blue colour. From the green cocoons or the greenish raw silk he extracted unchanged chlorophyll, which by treatment with ether containing hydrochloric acid could be split up into blue and yellow constituents.

In the last part of the *Gazetta Chimica* Roster, of Florence, announces the discovery of a new organic acid in urinary calculi. Full particulars have been sent to the forthcoming part of *Liebig's Annalen*.

Zoology.

On the Salivary Organs of the Honey-bee. By C. Th. v. Siebold.—At the annual agricultural meeting, held in October, 1871, at Munich, a well-known Apiarian, Hr. Mehring, exhibited a peculiar kind of honey that he named *Kunst-Honig* (artificial honey), and which he had produced by feeding his bees exclusively with malt. This honey excited great interest, and the question was raised whether this substance was real honey, and whether, consequently, the bee was able to change malt-sugar in its stomach into honey. The physiologico-chemical part of the inquiry was taken up in Liebig's laboratory by Dr. von Schneider, who, unfortunately, was prevented from carrying the investigation to the end; he arrived, however, at the conclusion that the carbo-hydrates sucrose and dextrose contained in the malt are actually changed by the bee into honey-sugar, and that Mehring's honey only differs from other honeys in the absence of the specific aroma which is imparted to them by the flowers on which the bees have been gathering. Practically, Mehring's discovery is of importance, inasmuch as the malt-food prepared by him contains not only the ingredients necessary for the life of the bee, but also those requisite for the formation of honey, and therefore it can be used with advantage in districts where flowering plants are scarce. With regard to the wax, Dr. von Schneider is of opinion that it is undoubtedly a secretion of the honey-bee, which is formed chiefly at the expense of different kinds of sugar; but he considers that the production of wax

from sugar cannot be maintained without simultaneous access to food containing nitrogen.

After the fact had been established that honey and wax are not substances found as such by the bee, but are productions which have undergone chemical change through contact with the secretions of the insect, Prof. von Siebold directed his attention to the investigation of the secreting organs, a branch of anatomy which indeed had not been entirely neglected, but which is now treated for the first time with regard to the special functions those organs appear to perform in the preparation of the products of the bee. Prof. von Siebold distinguishes three entirely distinct and very complicated systems of salivary glands, two of which (a lower and upper) are situated in the head, and the third in the anterior part of the thorax, the latter having been erroneously regarded by Fischer as a lung. Each of them has separate excretory ducts, and is distinguished by a specifically different form and organization of the vesicles secreting the saliva. Each consists of a right and left glandular mass, with right and left excretory ducts. For the detailed account of their minute structure we must refer to the paper itself, and the plate accompanying it. It may however be mentioned that this extraordinary development of the salivary organs has been observed by Prof. von Siebold in the workers only. The queen possesses only a rudiment of the lower cephalic system in the form of the two orifices of the ducts, while the ducts themselves as well as the glands are absent; and the two other systems are much less developed than in the workers. In the drones not even the orifices of the lower cephalic system could be found. (*Bienenzeitung*, 1872, No. 23.)

Observations in Myology. By G. M. Humphry, M.D., F.R.S. Cambridge, 1872, 8vo., pp. 192.—This is a re-issue of Prof. Humphry's valuable papers originally published in the sixth volume of the *Journal of Anatomy and Physiology*, excepting only a chapter on the myology of *Uromastix*. The collection contains a description of the muscles and nerves of *Cryptobranchus* and *Lepidosiren*, of the muscles of the dog-fish, *Ceratodus* and *Pseudopus*, and a chapter on the disposition of muscles in vertebrate animals generally.

Buller's History of the Birds of New Zealand.—The rapid progress of this work, of which parts 3 and 4 have been published together, will give great satisfaction to the subscribers. We are very glad to learn that in consequence of a request made by our leading ornithologists, Mr. Buller will issue a series of supplementary plates so as to include a coloured representation of every species of New Zealand bird.

Annali del Museo Civico di Storia Naturale di Genova. 236 pp.—The Marquis Doria published the third volume of this journal in December, 1872. It contains the following papers:—A. Paladilhe, on the new Asiatic genus *Francesia*, and on some new species of mollusks from Aden. W. Peters, amphibians from Sarawak. R. Gestro, note on some coleoptera. L. Fairmaire, on new Italian species of the genus *Adelops*. E. H. Giglioli, craniological notes on the chimpanzee. A. Morelet, notice of land and freshwater shells from Abyssinia. P. M. Ferrari, the species of *Aphidida* hitherto found in Liguria. This volume is illustrated by 9 plates.

New Publications.

- JAGOR, F. Reisen in der Philippinen. Berlin: Wiedmann.
 BRETSCHNEIDER, P. Ueber den Regenfall zu Ida-Marienhütte in den Jahren 1865—1872. Breslau: Korn.
 BOURBICCI, L. Corso di Mineralogia. Bologna: Zanichelli.
 CAMPI, E. Dei principali elettromotori. Cagliari: Timon.
 DONATI, G. B. Dell'urto di una cometa con la terra e particolarmente della cometa di Biela. Firenze: Le Monnier.
 NARDO, A. A proposito d'un congresso scientifico. Treviso: Priuli.
 DIEFFENBACH, F. Plutonismus und Vulkanismus in der Periode von 1868—1872. Darmstadt: Johnhaus.
 DÖTSCH, G. Ueber die hyperbolischen Functionen und deren Beziehungen zu den Kreisfunctionen. Nürnberg: v. Ebner.
 HARLACHER, A. R. Beiträge zur Hydrographie des Königreich Böhmen. Prag: Calve.
 HEUZÉ, G. Les Plantes alimentaires. Avec atlas. Paris: Raçon.
 LEVY, P. Notas geograficas y economicas sobre la republica de Nicaragua. Paris: Rouge.
 ASTRONOMICAL ENGRAVINGS from the Observatory of Harvard College, Mass. Plates i. to x. New York: Westermann.
 LANG, V. v. Einleitung in die Theoretische Physik: 3te Lieferung. Braunschweig: Vieweg und Sohn.
 KÖSTLIN, O. Ueber die Grenzen der Naturwissenschaft. Tübingen: Fues.
 DAY, St. J. V. On some Evidences as to the very early use of Iron. Edinburgh: Edmonston and Douglas.
 COHN, F. Ueber Bacterien. Berlin: Habel.
 MÜNTER, J. Ueber Corallenthiere. Berlin: Habel.
 QUÉLET, L. Les Champignons du Jura et des Vosges. Paris: Bailière.
 BRAUN, A. Ueber die Bedeutung der Entwicklung in der Naturgeschichte. Berlin: Hirschwald.

Philology.

Virgilio nel Medio Evo. By Dominico Comparetti, Professor in the Royal University of Pisa, Leghorn. Francesco Vigo. 1872. 2 vols.

WHEN the Florentine periodical *Antologia*, made so famous by Vieusseux, after succumbing to the unfortunate political circumstances of those days, was revived in 1866 by the enterprise of some Italian patriots of high rank, under the title *Nuova Antologia*, the first number, besides contributions bearing the honoured names of the former minister Count Terenzio Mamiani, the Princess Cristina Belgiojoso, the political economist Ferrara, and others, contained at its head an essay, *Virgilio nelle tradizioni letterarie fino a Dante*, which was subsequently (vol. iv. and v.) continued under the title *Virgilio Mago*. The place assigned to the first part of this work, in an undertaking of so much importance, destined to command increasing consideration and sympathy in Italy and elsewhere, shows sufficiently the place held by the author, Prof. Comparetti, in the opinion of the public—an opinion based on his very valuable and scholarly works (cf. *Acad.* 1870, No. ix.) and his conspicuous activity in the University of Pisa. This study on Virgil contained, indeed, a very interesting and instructive representation of the after life of that poet during the middle ages, of which the first part, that relating to the literary tradition, treated of a theme either entirely new, or new at least by the exhaustive way of stating all the relationships of the subject. Comparetti's treatise, however, was only a sketch; and prolonged and comprehensive studies have at last put him in a position to represent Virgil in the light of poet, scholar, prophet, and magician, as he appeared throughout the whole of the middle ages, and to explain the development and the phases through which his celebrity has passed at different periods, as well as its nature and sources and the links connecting it with the history of European thought. By beginning his researches with the lifetime of the poet, Comparetti is enabled to penetrate deep into the characteristics of his genius, and so to discern the internal connection of these phases more clearly than would otherwise have been possible. We see, for instance, how from the first the Virgilian poetry was more felt than reasoned about, its merits came home to the heart and the imagination more than to the intellect. As the most faithful organ of national sentiment, as an artistic product standing in the most perfect harmony with the taste, the tendencies, the culture, and the requirements of the national mind, it possessed a rare and well-founded *prestige* before which the name even of the great Roman orator grew pale. Those who had attempted to ascend from this impression to its causes and to an analysis of the Virgilian poem had hitherto stopped short with its external or formal side, and considered it almost exclusively as a subject for the learned critical researches of grammarians and rhetoricians; partly because of the general tendency of all studies in this direction, and partly because the true nature of the epopee had not yet been recognized. The poetic and national value of Virgil, the mighty enthusiasm which, though universally felt, could not be defined by criticism of so narrow a scope, served to exaggerate the apparent proportions of the part which had been defined. One does not, indeed, yet perceive the idea of the poet's universal knowledge, but that of his literary universality exists already and made his authority supreme in poetry and prose, in grammar and rhetoric, that is, in the most important and characteristic elements of the culture of the time. Those who speak of him are apt to exaggerate the number and variety of his merits, and Martial was not, doubtless, expressing a merely individual

opinion when he said that if Virgil had chosen to try his skill in lyrics or the drama, he would easily have surpassed the greatest of the lyric poets or tragedians. Thus from the first the poet's fame reveals the tokens and causes of that exaggeration which we are to trace in its later phases and fuller development. For though Roman literature continued to decay notably from the time of Marcus Aurelius, Virgil still maintained his place amongst the honoured names of the classical period, though the character of his celebrity was naturally modified by the changes of the intellectual atmosphere in which it survived. The time for truly poetic creations was past for Roman literature, but rhetoric, which lives by imitation, in taking the place of poetry continued to regard Virgil as the supreme model. Only as such imitations were poetic in form rather than substance, Virgil's influence was purely formal and superficial; notwithstanding which many poets of the period enjoyed high favour and satisfied the popular taste. But how could any one capable of enthusiasm for the poetical declamation of Statius form a just estimate of the poetry of Virgil, and free his admiration for the latter from contamination by the false feeling and perverted taste which extolled his stilted and bombastic imitations? However this may be, the fame of Virgil and his misconceived traditional greatness imposed upon men's minds, and led to an almost superstitious veneration. As early as under the Antonines we meet with the *Sortes Virgilianæ*, which after being consulted by Hadrian, continued all through the middle ages to be used like Homer and the Bible for the same purpose. Alexander Severus placed the bust of Virgil with those of other heroes and writers in a special Lararium, but not before the enthusiasm of many poets had already well nigh deified him. Silius Italicus celebrated Virgil's birthday every year by a pilgrimage to his grave, which he regarded as a temple; Statius did the like; Martial speaks of the Ides of October as a festival consecrated to Virgil, as the Ides of August to Hecate, or of May to Mercury. Thus we find Virgil considered as the patron saint of poets, and amongst the numerous apotheoses of the Roman empire this one at least was dictated by a genuine feeling, though, no doubt, springing from confused sources and carried to extravagant results. The condition of Roman literature during the third and fourth centuries is well known, and if now and then, amidst the crimes and orgies of the imperial court a faint echo of the Virgilian muse might still be heard, this proved, not the existence of a true poetic sentiment, but only that the poet's popularity defied the most unfavourable ages. He was then chiefly and almost exclusively employed as a school-book for the instruction of youth, or as material for the childish exercises of adults. In the schools he was studied so diligently that it was a common thing to know him by heart from one end to the other, whence the fashion for Virgilian centos. The explanations with which the study of the poet was accompanied must naturally have had great influence upon the way in which he was regarded, so that an exhaustive critical history of the numerous commentaries on Virgil would be of great value and importance; for all through the middle ages fresh ones were constantly appearing, and as constantly varying with the vicissitudes to which they were incessantly exposed. All who left the schools of the grammarians and rhetoricians had learnt to regard Virgil as the prototype of both, the author *par excellence*, who contained within himself the ideal of knowledge and culture peculiar to each age. What fruit this seed brought forth amongst mature men and professional students we see in the *Saturnalia* of Macrobius, where Virgil is celebrated as a marvellous encyclopædic author. The way had long been prepared for Macrobius's work, both in what concerned the materials which he used

and the spirit in which he wrote. The intellectual decline, so visible in the author despite his efforts to rise above the level of his time, had begun long before, as we have seen. Composed in the last days of the old heathen world by a writer who himself still belonged to that world, the *Saturnalia* threw the clearest light upon the character of the idea entertained of the poet in the last moments of Paganism, when his name was about to be transported into the new atmosphere of mediævalism. Two other authors belonging to this period of decadence, the great grammatical luminaries Donatus and Priscian, also helped to maintain the heathen tradition, and contributed to keep the fame of Virgil alive during the centuries of barbarism. But even outside the learned and scholastic world the poet had not lost his early popularity; theatrical pieces derived from his works continued to be represented, and one of the favourite subjects was the misfortunes of Dido, which moved the spectators to tears, and were so much in vogue as to be reproduced on carpets, in painting, and in works of art of every existing kind. Public recitations were not wanting, and in the sixth century the thronging people still came to hear the *Æneid* read in the *Forum Trajanum*. As centre and summit of the literary inheritance bequeathed by the Romans, as the expression of the universal Roman feeling which survived the Empire, the name of Virgil received such a lofty and comprehensive significance as to become in Latin Europe almost synonymous with civilization. With this mission the dying heathen society passed him on to later ages; and some centuries before Dante designated Virgil *virtù somma*, Justinian had thought it necessary to place his name side by side with that of the divine Greek poet who was his *pater omnis virtutis*, upon the most durable monument of the practical wisdom of the Romans. Meanwhile grammar was still regarded as the first of the liberal arts, belonging, indeed, always to the *trivium*, and we even find a Gothic king, Atalarich, in a letter addressed to the Roman Senate, solemnly rehearsing its praises, and recommending a proper care for the maintenance of its teachers. But where grammar reigned, there also reigned Virgil as its highest authority and inseparable companion. In the middle ages Virgil and grammar were almost convertible terms. Thus when Gregory of Tours says that, in his youth, Andarchius “*de operibus Virgili, legis Theodosianæ libris arteque calculi adprime eruditus est*,” one can only understand *de operibus Virgili* as referring to the study of grammar; and even when modern literature began to exist, and the thought of Europe began to stir along a new course, grammar, and Virgil with it, continued to occupy in popular recognition the same leading place which the above-mentioned king of the Ostrogoths had assigned to it in the sixth century. Classical antiquity survived the middle ages only by its hold upon the schoolroom. Together with Virgil, or rather as satellites of that great planet, reigned Ovid and Lucan, Horace, Juvenal, and Statius, and yet a few others, exactly in proportion to the degree of favour which they enjoyed amongst the teachers of youth. The names of these ancient authors with those of the elder grammarians were the first lesson impressed on the memory of children. When the child had become a man, and perhaps himself an author, it was impossible to efface these early reminiscences, which were kept alive by the very language in which he wrote. This is the explanation of the enormous mass of quotations from Virgil and other Pagan authors met with in Christian writers after the final extinction of Paganism and during the whole of the middle ages. Nevertheless, it was impossible for Christian feeling not to experience a certain repulsion for these representatives of Paganism, in consequence of which the same course of conduct was always pursued respecting them. The fathers

of the Church, indeed, who had written much against the heathen authors, had not ceased to make use of them for their own purposes, and this example was accurately followed all through the middle ages. These authors were carefully studied, quoted when necessary in original compositions, and even in theological controversies or biblical exegesis, yet denounced as "idolatrous dogs" whenever occasion presented itself. But if some pious scribes allowed themselves to indulge in these outbreaks, others again carried their admiration for Virgil to the point of fanaticism—e.g., Radbert, who gave his vote in chapter in Virgilian verses; the monk Probus, who had such an enthusiasm for Virgil and Cicero that his *confratres* ridiculed him, and pretended he wished to rank them amongst the saints; Bishop Rigbod of Trèves was said to know the *Æneid* better than the gospel, &c.

The extraordinary number of MSS. of Virgil which we possess is a further proof of the wide dissemination of his works in the middle ages, and of their use in schools; for one sees that many of them were evidently only transcribed for that special purpose, by the carelessness which makes them useless for criticism of the text. Meanwhile it was not only in language and style that the heathen authors were regarded by their Christian successors as masters and authorities; any passage that could be made to support a doctrine of the faith was used for that purpose without scruple, even though the natural sense might sometimes be forced, or even perverted, in the process. This was particularly the case with Virgil; for the high consideration in which he stood, as the greatest of the Latin poets, as well as on account of his morality and the extraordinary wisdom ascribed to him, led the Christian theologians to refer to him for such purposes more frequently and more confidently than to the other heathen poets, while, at the same time, they showed that he, of all the heathens, was the one who had approached most nearly to the truths of Christianity.

But, as is well known, the fourth eclogue was the chief source of his mediæval fame, as it was that which caused him to be reckoned amongst the prophets who, like David, Isaiah, &c., had foretold the coming of Christ. He appeared, accordingly, with them in the religious plays of the middle ages down to the revival of letters, and as by this means even the lowest classes were familiarized with his name, the idea of him in this new legendary shape gradually blended with the other popular conceptions of Virgil as a magician, of which we shall have to speak further on. For the rest, the ecclesiastical writers were not the first to find in Virgil's works whatever they chose to look for in them. The heathen commentators, too, were led by the prevailing taste for allegorical interpretations to apply the same method to his poems, and all the more because they failed to conceive how such a mighty sage as Virgil was supposed to be should have omitted to conceal something much deeper and more profound under the apparently simple narrative of the *Æneid*. He was not indeed used by the apologists of Paganism against the Christians, but his works were allegorized by philosophers as well as by grammarians, by Pagans as well as Christians, and the hidden mysteries discovered by both were held to refer only to points of ethics and philosophy, especially to the vicissitudes of human life in its struggles after perfection.

The loss of so many monuments of antiquity is the reason that few specimens of this mode of interpretation as we find it in Donatus, Servius, and Macrobius, have survived till our time. The most important of these is the work of Fulgentius, a Christian writer of uncertain date, who cannot, however, have lived later than the sixth century. His work, *De Continentia Virgiliana* (i.e., what is contained, or

rather hidden, in Virgil), is one of the most strange and curious productions of the Latin middle ages, and at the same time the most characteristic monument of the fame of the poet in the midst of Christian barbarism. In the pre-ambles the author declares that he shall limit his labours to the *Æneid* alone, because the *Bucolics* and the *Georgics* contain a mystic sense so profound that scarcely any human skill would be able to penetrate them entirely. But neither in this work nor in its continuation, the *Mythologicon* of the same author, is there a single word bearing upon the struggle between the two faiths. The fundamental principle of the latter, as of the *Continentia*, is purely philosophical, and aims at reconciling the ancient myths, not with Christianity, but with philosophy. It was thus brought about in the most natural way, and without interruption of the classical tradition, that the Virgil of Fulgentius, that is to say the Virgil of Christian barbarism, appealed to sympathies which were well calculated to smooth away the incompatibility between the great heathen poet and the followers of Christianity. And this type—in which we trace the mediæval conception of human reason approaching as nearly as its fallible nature, without the succour of miracles or revelation, would allow, to principles akin to those of Christianity,—this type is only a rough foreshadowing of that which we find purified and sublimated in the poetry of Dante.

The result at which we have arrived thus far is that there were many different sides to Virgil's mediæval celebrity: a philosophic-religious side, an historical side—for the splendour of the Augustan reign, the beginning of the empire, and the near approaching birth of Christ offered, taken together, the most favourable conditions under which a great literary name could be historically presented—and, lastly, a grammatical-rhetorical side. The latter is certainly the lowest and most trivial, the coarsest and most barbarous; for what is one to think of a commentator on Virgil who explains *efficiens* by *effigiem*, *imaginem*? or who reads for "*Quo te, Moeri, pedes?*" "*Quot, Emori, pedes,*" and sees in it an allusion to the four legs of a breed of very swift Saracen steeds called *Emoris*?* Or what is to be said of another commentator who begins his explanation of the *Bucolics*: "In those days, when Julius Cæsar was at the head of the empire, Brutus Cassius ruled over the twelve communities of the Tusci; and there began a war between Cæsar and Brutus Cassius, who had with him Virgil, and Brutus was defeated by Cæsar; but not long afterwards Julius was beaten to death with stools"? Nevertheless, as has been already observed, the grammatical side of Virgil's celebrity in the middle ages was really the most important, and the one upon which the others essentially depended: as for the purely æsthetic side, it was simply not recognized at all; though if its existence had been recognized, however imperfectly, all the other substitutes for it might have been dispensed with, or would have been very differently conceived.

At the end of the first volume or part of his work, Compareschi begins to discuss the Virgil of Dante, and points out at starting that Dante's strong Italian feeling was the principal motive for the sympathy and preference which he displays for Virgil; he treats him as peculiarly a national poet, and calls him "*la nostra maggior musa,*" and "*il nostro maggior poeta.*" His Italian soul was enraptured with the *Æneid*, in which he seemed to be reading the ancient history of Italy; for Italy, as he thought,

* This is crazy enough: yet I cannot help referring to the reading *δὴ στήλην* for *διαστήλην* (Il. i, 6), which has not failed to find an interpretation and advocates.

"Mori la vergine Camilla
Eurialo e Turno e Niso di ferute."

His admiration for Virgil was independent of the tradition which asserted his greatness; he felt Virgil's power himself, he recognized the dependence upon him of so many other poets, which made Virgil the *onore*, the *lume* of all; he knew that to him all "*fanno onore*," and that "*di ciò fanno bene*." As a true poet he was sensible of all the perfections of Virgil's poetry; as an Italian he was proud of such a miracle of art, for both Latin and Italian were the national language of Italy, and Virgil is the *gloria dei Latini*. Still Dante's Virgil is not the real Augustan poet, but that ideal Virgil we have already described; though it was not altogether in virtue of the mediæval halo that he had selected Virgil as his guide through the nether regions. Virgil was the favourite writer, whose works supplied food for more than one of his most intimately cherished visions, but at the same time Virgil, like Beatrice, was liable to be drawn into the currents of that majestic mind, and following its course, was idealized as the disciple's nature demanded. For Dante Virgil was not merely the representative of Italian nationality and patriotism, of Italian glory and empire, but he found in the *Æneid*, interpreted after the allegorical fashion of the day, the same journey along the path of contemplation which he had taken for the subject of his own poem, according to his conception of the relations between reason and faith, and of the power of the human intellect to attain certain primary truths without the aid of revelation. Virgil shone forth from amongst the hosts of illustrious ancients, and especially from amongst the poets, as, according to mediæval ideas, the purest and most enlightened of all, while in point of time he was also the nearest to Christ, and had even prophesied of him unknowingly. Finally, from Virgil he borrowed the first idea and many details of his journey through the lower world, and throughout his great work he makes use of him more frequently than of any other author.

It is evident that with Dante's high ideas of Virgil, he must have been revolted by the legends of his magical power which abounded amongst the lower classes of Naples, and were only too readily accepted by contemporary writers. Besides this, the way in which sorcerers and astrologers are treated in his poem shows that he did not, like the populace, look upon these arts as constituting the deepest wisdom, but that, on the contrary, the wisdom of Virgil, as he conceived it, was quite incompatible with their exercise. We see thus that the Virgil of Dante, even when the latter adopts some of the ideas of his time, still belongs to him alone; and may serve, as an original conception, for contrast with another personification of the mediæval Virgil, belonging to the same century, the Virgil of *Dolopathos*. This is a romantic work, from the cycle of the *Seven Wise Masters*, proceeding from the commonplace, uncultivated mind of a monk, in which the literary idea of Virgil appears at its lowest point of approach to the vulgar popular conception; just as the Virgil of Dante belongs to the highest intellectual sphere, in which we see the decaying literary mediæval traditionalism at the point of passing into the living classical feeling of the renaissance. In *Dolopathos* Virgil is represented as he must necessarily appear to the common scholastic conception when viewed in the light of fantastic romance, though we need not ascribe to that work a popular origin independent of the schools. He appears as the great master of all secular wisdom; his only fault is that he is a heathen, but he is as little of one as it was possible to be before Christ; nothing is wanting to him but a knowledge of the unity of God; he is of pure morals, and a great philosopher, no one is more famous than he, or more honoured by

Augustus; kings and emperors bowed before his words; he was the "*clerc*" *par excellence*, the greatest poet, and the most learned of men. In this travestied personage it is easy to recognize the Virgil of the mediæval schools and grammarians, of the text-books of the seven liberal arts. The first part of the work before us ends with the Virgil of the *Divina Commedia*, and of the *Dolopathos*, in which we see the summary of all that goes before. They represent the two extremes of Virgil's mediæval celebrity: the noble idea of a rare and powerful mind, and the trivial idea of a vulgar mind combined with romantic elements; they belong to different tendencies, and are both distinct from the scholastic conception which was their common source, though one exceeded it as much in loftiness and dignity as the other fell short in poverty and coarseness. After Dante we come to the revival of letters and the beginning of modern thought, both of which lie beyond the limits of the present inquiry; while the Virgil of *Dolopathos*, by the introduction of a romantic element, leads the way to a study of the poet's fame in a different region from that already handled, and so brings us to the second part of the work.

The subject of the second part of Professor Comparetti's work is Virgil as a *magician*—a character which was seldom ascribed to those ancient sages, amongst whom, as we have seen, Virgil was reckoned, and then only momentarily or in consequence of a confusion of names; for though every magician, according to the notions of the middle ages, was a wise man, not every wise man was a magician. No other ancient sage has been made the subject of a legend so circumstantial and complete as that of the sorcerer Virgil. Such a legend could only arise if a special popular idea of Virgil existed quite independently of literature, and, in fact, a closer investigation shows clearly that the conception of Virgil as sorcerer and thaumaturge was originally derived from the people, though it was subsequently absorbed in the literary tradition, with which it had some points of kindred. The "people" in this case was the Italian people. And here it may be observed that there is often a foundation of ancient historic or mythological facts for the legends which took their rise in Italy; still more commonly they are suggested by ancient monuments, though sometimes nothing but the names preserved in them are ancient, for many of the great Roman names lingered in the memory after they had been dissociated from the facts with which history connected them, though they might still be associated with some characteristic trait; but whatever historical circumstances might survive, could only do so in a form adapted to the comprehension of men and women of the populace, like her of whom Dante says:—

" . . . Traendo alla rocca la chioma
Favoleggiava colla sua famiglia
De' Trojani, e di Fiesole e di Roma."

A most striking proof of what has just been asserted is afforded by the legend of Virgil which took its rise in Naples, and thence spread over the whole of European literature, but most rapidly and vigorously out of Italy. In that country the legend was essentially a popular product, free from all poetical or literary admixture, a popular belief, superstitious in character, and founded partly upon local reminiscences of Virgil's long residence at Naples, and partly on the presence and celebrity of his tomb in that city. The superstitions related to places, images, and monuments in Naples, to which it was supposed that Virgil had imparted a talismanic potency. These legends remained peculiar to the people of Naples without finding any poetical or artistic expression; in the other parts of Italy they were little

known or considered, but foreign visitors to Naples collected them, and, thus transferred from their native plebeian to cultivated and literary spheres, they made their appearance simultaneously in popular romance and in learned Latin works. In both spheres the idea of Virgil as a typical sage was already of such a character as to secure an easy acceptance for the legends. And so it came to pass that, after the twelfth century, that is to say, after the rise of the so-called romantic fiction, in prose and verse, we encounter a new, and, what is more, a popular phase of Virgilian renown, with various springs and accretions, and a history peculiar to itself. We do not call this phase popular because it continued strange to learning and the learned, for our knowledge of its history is in great part derived from works by the latter class; but because, as has been said, it arose amongst the people, and was nourished upon popular ideas. Amongst the earlier works bearing on the investigation, three are of importance from the fulness of their details, all written in Latin, and intended for the higher classes of society; that by Konrad of Querfurt, Chancellor of the Emperor Henry VI., and his viceregent in Naples and Sicily, afterwards Bishop of Hildesheim; another by Gervasius of Tilbury, an Englishman by birth, Professor of Law at the University of Bologna, and a Marshal of the Empire at Arles under Otho IV.; and lastly that of Alexander Neckam, foster-brother of Richard Cœur-de-Lion, Professor at the University of Paris, and Abbot of the Augustinian monastery at Cirencester. The two first not only give us the earliest account of the Virgilian legends, which they gathered in Naples itself from popular tradition, but they point to a Neapolitan origin for the tradition, which is confirmed from other independent sources. Konrad mentions the legends in a letter from Sicily addressed to his friend, the prior of a monastery at Hildesheim, in 1194, in which he describes his impressions of Italian travel. This letter is a very remarkable monument of the spirit in which even educated foreigners at that time visited Italy. Their imagination was heated, and they had formed at a distance such a phantastic conception of the country whose name was so glorious, that even a near vision of the reality failed to shake their beliefs. A thousand strange tales which they had heard before, a thousand classical reminiscences of half-forgotten school lore, crowded on the visitor's brain, who seemed, as in an enchanted land, to see very different and much greater things than he really did see. In no other way can one explain the gross absurdities which the worthy Chancellor writes down with quite distracting gravity and good faith. What had he not seen in Southern Italy! Olympus, Parnassus, the Hippokrene, and he is delighted to find that all these wonders are contained within the German dominion. After passing with profound awe between Scylla and Charybdis he finds—Heaven knows where!—the island of Scyryus, where Thetis kept Achilles concealed, and he was made happy in Taormina by the sight of the Minotaur's labyrinth, and by introduction to the Saracens, a people possessing the same enviable faculty as St. Paul, of killing snakes with their spittle. He fulfilled punctually his master's commands to raze the walls of Naples, and yet did not hesitate about accepting the belief then prevailing amongst the inhabitants of the city, that these very walls had been erected by Virgil, who had provided a palladium for their defence, to wit, a small model (*imago*) of the town, contained in a narrow-necked flask. Konrad ought certainly to have been the first to doubt the efficacy of the palladium; but there is no shaking the faith of those determined to believe, and accordingly Konrad says that the failure of the talisman was accounted for by the presence of a slight rift in the flask, which the Germans also succeeded in discovering on close

inspection. This might be taken for a jest but for the whole tone of the letter, and the numerous other absurdities recorded with equal seriousness. We now come to Gervasius of Tilbury, who, in his *Otia Imperialia*, written for the amusement of the Emperor Otho IV., has given us as it were an encyclopædia of fables and usages of all kinds, forming a most valuable authority for the history of popular superstitions. Many of his Virgilian legends are substantially identical with those related by Konrad, though there is the degree of variation in points of detail usually met with in oral traditions such as they both relied upon. Others again are peculiar to himself, and transport us at once to Naples at the end of the twelfth century, when the legends still thrived in their original home amongst the people. As for Alexander Neckam, but little is known of his life (1157-1217), and it cannot be positively decided whether he ever visited Naples or not. The date of his work, *De naturis rerum*, is doubtful, but certain indications allow us to infer that it must have been written between 1180-1190, whence it follows that, at that time, the Virgilian legends were known in Europe independently of the writings of Konrad and Gervasius, and must have been disseminated by earlier visitors to the city. For what concerns the substance of these legends, we have already seen that in their earliest form Virgil appears as the protector of Naples, while the wonders ascribed to him consist chiefly of talismans; since, apart from the traditions of antiquity and the importation into Europe of ideas pertaining to the Semitic races, the belief in talismans had gathered strength in the south of Italy during the Byzantine rule. In fact, we find in Constantinople itself objects of the same kind ascribed to Apollonius of Tyana as in Naples to Virgil, and connected in the same way with particular monuments of the city; and the same was the case in Paris at the time of Gregory of Tours. If one connects with the above legends another given by John of Salisbury, who, according to his own statement in 1160, had crossed the Alps ten times, and travelled through the south of Italy, and consequently knew Naples well, one may form an idea of the original form of the Virgil legend as it existed amongst the Neapolitan populace. The leading idea seems to have been that Virgil not only resided in that city, but that he was either its actual ruler, or at least had, by means of his relations with the court, a considerable share in its government; and that in either case he never failed to display an earnest zeal for the public welfare. There were, moreover, various ancient and mediæval monuments to which the vulgar, there as elsewhere, ascribed marvellous and mystical properties, and we have already seen what a halo of profound wisdom seemed to the learned of the middle ages to encircle the name of Virgil, so that the people of Naples were naturally led by the same idea to ascribe all such talismans to him. But as this idea was universal, the question arises how the legend relating to him came to have an exclusively Neapolitan origin; and this is the last and simplest expression to which the problem of the legend can be reduced. To begin with, the existence of Virgil's tomb at Naples is one of the principal facts which explain the survival of his name amongst the traditions of the Neapolitan people. Whatever we may think of the authenticity of the site pointed out now or in the middle ages as the resting-place of the poet, there can be no doubt that Virgil both wished to be and actually was interred at Naples, "via Puteolana intra lapidem secundum," as his biography in Donatus says. This notice is apparently derived from Suetonius' (A.D. 98-138) Life of Virgil, and is confirmed by other statements, which show that Virgil's tomb became one of the chief glories of Naples, and attracted visitors almost in the same way as a favourite

temple of some god, as we have already seen with Silius Italicus and Statius. In the fifth century Sidonius Apollinaris still regards the grave of Virgil as the glory of Naples. It is evident that the people of the city, witnessing the veneration in which the poet was held, could not fail to keep at least his name in memory. For the earlier part of the middle ages, it is true, we have no direct information on the subject; but one may fairly conclude from the great and increasing reputation of the poet that the Neapolitans must have been accustomed for centuries to hear the name of Virgil repeated and his grave asked for by every visitor of any degree of cultivation. We see from the same biography how familiar the people of Naples were with his mild, modest expression of countenance, so that they were accustomed from it to call him *Parthenias*. Comparetti also thinks that his name was kept in remembrance partly by plots of ground in the neighbourhood of Naples which had belonged to him, like the *Garden of Virgil* on the present Monte Vergine, of which Gervasius tells that all manner of medicinal herbs grew there. The name of this hill has undergone several transformations, for it was called in the middle ages *Mons Virginis*, *Mons Virginum*, and *Mons Virgilianus*. The latter designation, like the *Garden of Virgil*, is most easily explained by the supposition that the poet had really owned a piece of ground there; and it is certainly clear from Aulus Gellius (ii. 213, cf. Serv. *Æn.* vii., 740) that scarcely 150 years after Virgil's death people spoke of his possessions in that neighbourhood. The circumstances we have mentioned prove sufficiently that Virgil's fame survived in Neapolitan folk-lore even during the ages in which history and written records have nothing to tell us of the mode of its preservation. By way of final result we ascertain that there were two distinct elements in the oldest form of the Neapolitan Virgil legend: first, the name of Virgil connected with the belief in his especial affection for the city of Naples; and secondly, the belief in certain talismans attributed to him. The first element is exclusively Neapolitan, and goes back, perhaps, to the time when he lived at Naples and chose to be buried there; the second is not originally peculiar to Naples, and is undoubtedly of later date than the first. The two became amalgamated together because the mediæval idea of Virgil's infinite wisdom, combined with the old recollection of his preference for Naples, caused him to be credited with works of wonder that were supposed to be of public utility as well as creations of secret and profound knowledge. In this oldest form of the legend Virgil never appears in a ludicrous light, and all thought of magic or diabolical arts is rigorously excluded. Gervasius of Tilbury attributes Virgil's talismans to the *ars mathematica*, i.e. astrology; and Boccaccio, who lived later, when the Virgil legend had already begun to change its character, did not think he was injuring the fame of the poet he honoured so highly by making him accomplish his wonders by the help of "*strologia*," as he had been a "*solenissimo strologo*," an idea which we find expressed before by Servius and others. But here arises the further question, when the belief in these talismans arose in Naples, and when it became associated with the name of Virgil. And to this our written authorities can give no reply, for it would be folly to suppose that ideas of the kind were no older than the earliest mention of them which we chance to find in John of Salisbury. Everyone who has studied legendary lore knows how slowly and secretly the mythology of different nations forms itself, and then all at once rises to the surface amongst writers of books—a process which leaves it probable that part, and probably the greater part, never reaches us at all, but falls a prey to oblivion. We need not therefore be surprised at not meeting with the Virgil legends before the

twelfth century, for it was exactly in that century that light began to break upon the inner life of the Italian towns, and therefore of Naples as well, which then began to issue from its state of isolation, and formed a part of the new kingdom founded by Roger, while it increased so much in importance and consideration as to become ere long the capital of an influential state.

We turn now to the later legends respecting Virgil, in which he appears as a *magician*, and here it must be observed that the first and most radical change in the structure of legends always begins when they leave the soil from which they sprang, especially when they owe their existence to some local, historical, or traditional motive. In strange countries they cannot of course be understood as easily as in their native home, and so they are exposed to be misunderstood and metamorphosed. Thus while the primitive Virgil legend could not tell of diabolical arts because the feeling of the Neapolitans forbade the belief that their town owed its supposed advantages to such arts, or that Virgil, its protector, could have practised them, these objections lost their weight when the legend spread from Naples all over Europe. Besides this, it was only a step from the *ars mathematica* or *astrologica* to the Black Art or necromancy, and if for the above reasons the Neapolitans declined to take that step, there was nothing to prevent Virgil, who was a heathen to begin with, from being made in other countries to share the fate of Gerbert and other famous students of mathematics and astrology, who were transformed into magicians and necromancers. We need not be surprised at finding the Virgil legend, as soon as it became known beyond Naples, promptly utilized by those *jongleurs*, those *cantores Francigenarum*, who were at once poets, ballad singers, and mountebanks, and had no higher object than to amuse the people in public places by their arts as well as by their *Contes* and *Fabliaux*, and so to charm the money from their pockets; accordingly, so early as the beginning of the thirteenth century we find in the *fabliaux* versions of the Virgil legend which are not to be met with in Naples. Nor did it fare differently amongst men of letters. As with Neckam, who, as we have seen, was probably never at Naples, so with Helinand, the author of a Latin chronicle, who also wrote a little before Gervasius, but cannot either have visited Naples; while from the French poets, popular and courtly, their German imitators of the thirteenth century—Wolfram of Eschenbach, Frauenlob, Enenkel, the author of the *Wartburgkrieg*, &c.—learned to know Virgil as a magician and necromancer, and thus helped to spread his fame amongst the people as well as amongst the learned. And here it is noticeable that the relations between Virgil and Naples, characteristic of the oldest Virgil legends, always occupied a very subordinate place in the learned tradition; for Virgil was one of the most conspicuous figures in the ancient literary world, and his name therefore could not be separated from the natural centre of the latter; the legendary Virgil could not exist apart from the legendary Rome. How could it be believed that he whose magic arts had done such wonders for the benefit of Naples, should have done nothing for Rome, *Roma aurea*, *Roma caput mundi*, Rome whose origin he had made immortal in immortal verse? This omission in the Neapolitan legends had to be supplied, and was supplied as soon as they began to spread over Europe. We find accordingly in Neckam and Helinand a Roman Virgil legend, that of the *Salvatio Roma*, which refers to the capitol, and it must be admitted that the invention of such legends did not call for any great exercise of the imagination. For as in Naples the belief in certain miraculous objects existed independently of Virgil's name, which was arbitrarily associated with them by the people, things of

the same kind had long existed in Rome, and it was easy to give them a godfather in the mode already practised by the Neapolitans. The only difference was that the Neapolitan legends acquired a Virgilian cast in Naples and at the hand of the Neapolitan people, while the Virgil legends of Rome were invented outside the city, in more literary fashion, and certainly in imitation of those of Naples. The above-named legend of the *Salvatio Romæ* is the earliest instance connecting Virgil with Rome; for though we know that Virgil possessed a house on the Esquilinum, he does not seem usually to have resided in Rome, and even had he done so, the fact would have left less vivid recollections than at Naples; for the inhabitants of the capital of the greatest empire in the world were too much accustomed to striking personalities and remarkable things of all kinds to retain so deep and lasting an impression of Virgil's personality, though they might be able to recognize and acknowledge his value. Accordingly when we find in Rome this or that monument connected with the name of Virgil we are not to see in this the result of a living tradition respecting him preserved by the Roman people, but only a reflection of the Neapolitan legend transplanted to Rome. When the latter had, in the thirteenth century, made its way into all parts of Europe, it became more and more developed, in all sorts of versified works, especially some French ones which were much read; such as the *Image du Monde*, the *Roman des Sept Sages*, the *Clémades*, as also in the German rhyming chronicle of Enenkel (1250); and in the fourteenth century *Renart Contrefait*, the *Vilgier des Histoires romaines*, a translation of the *Gesta Romanorum*, &c., &c. In all these works Rome was naturally the chief scene of Virgil's exploits; for even when the Neapolitan legends were retained, they were sometimes so far altered as to be transferred to Rome, while the number of those peculiar to Rome increased. And at this point it was natural to transfer to Virgil, whose transformation into a magician was already complete, the stories told of eminent personages whose destinies resembled his own, so, for instance, the Gerbert legend which tended the more to be confounded with the Virgilian, as many well-known authors had related the one as well as the other. The Sibyl legend must also be noticed here on account of its relation to Virgil. At the time to which the magical part of the Virgil legend belongs, there was a widely-spread belief that the Sibyl had prophesied the coming of Christ; it originated amongst the Apologists, and had then, after the twelfth century, been introduced by ecclesiastical writers to the religious world, and took firm root even amongst the laity. Now as the prophecy in the fourth eclogue of Virgil, which was applied to Christ, was familiar to the whole religious world in the middle ages, the popularity of the Sibyl was transferred to his account, and this the more easily, as he was already popular in other ways. Sermons, especially about Christmas time, gave frequent occasion to couple his name with that of the Sibyl; and in Christian art the two were often placed side by side, or else the passage of the eclogue was added to paintings of the Sibyl, and lastly, in more than one religious mystery-play amongst other characters Virgil and the Sibyl appeared together. Hence and through many other circumstances it came to pass that the original conception of Virgil as a prophet of Christ passed through several phases, and finally connected itself with one of the legends respecting him, which related how Virgil became a magician, or procured the book from which he learnt magic art; though the same legend is to be found in other versions without any reference to this prophecy. The legend of Virgil's skill in magic elaborated itself more and more, and penetrated further and further into all Latin and German countries; it was familiar to every writer, and it was the more certain to grow that the

proverb "On ne prête qu'aux riches" holds good also of romantic legends.

A more abstract expression of the idea formed of the magician Virgil may be found in a curious Latin book, which does not, indeed, contain any Virgil legends, but is connected with him by the name which the author assumes, and by the nature of the things contained in the work. It bears the title *Virgilii Cordubensis philosophia*, and this Cordovan Virgil is ostensibly an Arabian philosopher whose work was translated into Latin at Toledo in 1290. The author, however, was certainly no Arab, and knew very little of Arabian matters, or he would never have believed that an Arabian philosopher could be called Virgil, much less have mentioned Seneca, Averroes, Avicenna, and Algazel as his contemporaries at Cordova. He is a charlatan who wished to attract consideration by taking the name of Virgil and the character of an Arab sage. With rare impudence he relates at the beginning of his book how the most learned men from all quarters of the globe, who met together at Toledo to discuss the most difficult problems, used to appeal to him because they knew how vast was the knowledge of all secret and abstruse subjects which he had attained to by means of the science, called by others *necromantia*, but by him *refulgentia*. The Latinity of the book swarms with the grossest blunders; the philosophical idea is a gigantic hodge-podge of rabbinical and Christian doctrines, amongst others that of a triune God. Of Virgil there is nothing but the name, and yet one sees from the whole nature of the work that the author's reason for assuming it lay in the ideal conception of Virgil the magician; just as a similar conception of Virgil's relation to the study of grammar led the no less mad grammarian Maro Virgilius of Toulouse (perhaps sixth century) to assume the same name. This correspondence between the results produced in two totally different phases of the Virgilian name, is one of the most remarkable facts in the history of that name, which has not only, in the course of its varying fortunes, undergone the influence of many changes in the world of thought, but also resumes them so vividly in itself that it has become their symbol and representative. The legend, however, did not spare Virgil a single trait belonging to the popular conception of a magician and adept in the Black Art, for when once he had been accepted in this character, and the legendary nucleus of which it was the development had become familiar to all, everything else followed as a matter of course, so that, at last, his legend, instead of being a simple register of miraculous works associated with his name, came to contain a series of incidents portraying his personality and presenting the elements of a biography. To these elements must be added another part that may be called sporadic, and consists of narratives to which the name of Virgil is seldom attached, and which are not included in collections bearing on his magical exploits; his name seems rather to have been added arbitrarily by some editor or compiler from association of ideas, without the incident being of any importance or recurring anywhere else. This is especially the case in the *Gesta Romanorum*. There is one more side wanting to complete the legendary form of Virgil, for it was impossible that such a familiar favourite in the world of romance should always, in spite of the fame of his actions, have avoided coming in contact with the fair sex. And the legend is far from being deficient in this particular, where the omission would certainly have been abnormal. The spirit in which the subject is treated may be guessed by anyone who considers that notwithstanding a few pure pictures presented by hagiography and Christian legend, notwithstanding the incense liberally offered to women in romances, tournaments, and courts of love, the female sex has never been more

shamefully abused, ridiculed, and degraded than was the case during the middle ages in the works of grave theologians, as well as in poetry and on the stage. An incredible number of trivial and obscene stories and anecdotes dragged it through the mire, and, what is scarcely credible at the present day, figured not only in the repertory of the ballad singer who aimed at raising a laugh in open market-places, but in that of the preacher as well, who would relate them from the pulpit, under the pretext, it is true, of some moral to be drawn from them, but really often only with the same motive as the other mountebanks. Anyone who is acquainted with these storehouses of illustration will understand Dante's wrath as he exclaims :—

“Ora si va con motti e con iscede
A predicare, e pur che ben si rida
Gonfia il cappuccio, e più non si richiede.”

All the earlier part of the Virgil legend, so far as it relates to women, is in a spirit harmonizing with this degraded view of the female sex. Of the many well-known versions of this class of incident it will be sufficient to allude briefly to three : one in which Virgil makes an assignation with a lady by night, and was to be drawn up to her window in a basket, instead of which she leaves him suspended half way till the morning, so that he saw himself exposed to the ridicule of all Rome, and in consequence executed frightful vengeance on her (a farcical incident of which Bulwer has made use in *Pelham*, of course with omission of the latter part); the story of the *Bocca della Verità*, in which a faithless wife artfully clears herself from guilt without direct falsehood; and lastly, the incident only given in the early English book on Virgil, in which he makes some women believe by glamour that they are passing through water, which causes them to hold up their clothes rather higher than was needful—a practical jest which is mentioned here chiefly because it seems to me, like other Virgil legends, to be derived from India (cf. Polier, *Mythologie des Indous*, ii. 40-42). If we return to the general character of these legends we see that, with the exception of those taken down by Konrad and Gervasius at Naples, they were nearly all first applied to Virgil out of Italy, and found little acceptance amongst Italian writers. The most important *Neapolitan* record bearing on the Virgil legend is the *Cronica di Partenope* by Bartolomeo Caracczalo dicto Carafa, cavaliere di Napoli, which goes down to the year 1382, and, as the author himself says, is a compilation from different chronicles, a character which it preserves even in what relates to Virgil, for though himself a Neapolitan, the author does not restrict himself to the traditions still current in his native place, but incorporates everything bearing on his subject in Gervasius and a certain Alexander, both of whom he quotes. If by the latter he means Alexander Neckam, he can only have read his work *De naturis rerum* in a mutilated and interpolated MS., or in extracts by some other author, or in some imperfect and incorrect version. Besides a few additions conceived in the same spirit as the rest, we find the legend substantially the same in the fourteenth as in the twelfth century. Nothing diabolical is ever attributed to Virgil; on the contrary, the author always speaks of him with the greatest reverence, and is never tired of calling him “esimio poeta,” while there is not the slightest allusion to his gallant adventures. In lower Italy the Neapolitan legends seem to have been nearly as well known as in Naples; but in the rest of the country they spread slowly, at least until the fourteenth century, when the national and the foreign element became likewise fused, partly as a consequence of the relations which are well known to have existed at that time between the literature of Italy and the rest of Europe.

At Rome too, as has been said, the name of Virgil was in the first instance only connected with separate spots or monuments, such as the *Casa di Virgilio* (the Temple of Jupiter Pluvius), the *Torre di Virgilio* (the Meta sudans), the *Scuola di Virgilio* (the Septizonium), and if we connect these names with the report of the annoyances to which Petrarch was exposed at the Roman court on account of his Virgilian studies, we may reasonably conjecture that at that time the charge of magic in its worst sense was held to blot the fair fame of the poet in Rome. But this idea did not arise there earlier than elsewhere, for while the MSS. of the *Mirabilia Urbis Romæ* (the guide-book of the mediæval traveller or tourist at Rome) belonging to the twelfth century contain no notice of Virgil's name, in the thirteenth century the Viminal hill is mentioned as the place “from whence Virgil, having made himself invisible, departed to Naples from his prison.” The same circumstance is mentioned in the Mantuan rhymed chronicle of Bonaventura Aliprando, composed in 1414. We must take this occasion of pointing out that, of the three towns associated with Virgil's life, Naples was the one in which he left the most lively impressions, while Mantua, where he was born, but seems seldom to have resided, never produced any fanciful reminiscences of his person. Of course, Mantua did not forget, in the middle ages, that it was the poet's birth-place, and some localities in the neighbourhood bore his name, or otherwise commemorated his existence; but these were, rightly or wrongly, connected with real events or circumstances in Virgil's life, and excluded any notion of miraculous powers. Aliprando's chronicle, moreover, shows, by its primitive style and the absurdities heaped together in it, that if Mantua had had any peculiar Virgil legends, the author was the very man to have retailed them conscientiously, if they had come to his knowledge; but we find nothing of the sort. Speaking generally, the Virgil legend never took the same proportions in Italy as in other countries; we hear only, as it were, a faint echo of the ample narratives which, beyond the Alps, trace out his character as a sorcerer and a dealer in all the devil's arts. It is the more intelligible that these legends failed to thrive in Italy if we consider that there, just at this time, classical studies were beginning to revive; and in proportion as the ancient authors began to be studied with methodical earnestness and their real character ascertained, the traditional admiration, with its artificial or legendary adjuncts, of which they had been the objects during the middle ages, naturally tended to disappear. In Italy, where the torch of such studies was first relighted, the Virgil legend burnt its wings and had to keep aloof so that it could only flutter timidly about, protected with great pains by superstition and burlesque. We come now to the last phase through which the Virgil legend passed outside Italy. This consisted naturally in a kind of synthesis of all its predecessors, of which it, at the same time, gave the final result. The legends in point are collected together into a circumstantial biography in the Liège Chronicle of Jean d'Outremeuse, called *Myreur des Histors*, a compilation from writers of various dates down to the end of the fourth century. The life of Virgil is mixed up with other narratives which from time to time interrupt the chronological order, yet it is easy to consider it as a separate work which the author afterwards divided and introduced at different points in his chronicle; it is in several respects a curious composition. The author has amplified or developed the old materials before him, but he has kept the historical Virgil as much at a distance as possible; and this although Aliprando and others had made use of the notices of Virgil given by Donatus, and even Jean d'Outremeuse had some knowledge of the poet's

own works and the earlier accounts of his life. The scene of Virgil's exploits is still, according to him, Rome and Naples; but he was not of Italian origin, but the son of Gorgilius, King of Bugia, in Lybia. Setting forth in search of adventures, he comes to the country of the Latins, whose king, the uncle of Julius Cæsar, tells him so much about Rome that he wished to go there, and finally did so. This sample may suffice, as we have no space here to enter further upon this farrago of fantastic absurdities, though to do so might not have been entirely without interest, and only observe that Jean d'Outremeuse cannot have had any influence on the life of the legend, because, though he brought all the scattered anecdotes of Virgil together and worked them up into a coherent whole, the result was concealed from public notice in an obscure and voluminous chronicle. In fact the book on Virgil which was most popular and most widely known in Europe after the sixteenth century, has few stories in common with the version of Jean d'Outremeuse, and possesses quite a different character. It is easy to see that, it had its origin in France, and that after the invention of printing. Its title is *Les faits merveilleux de Virgille*. In consequence of its popularity it was translated into English, Dutch, and Icelandic, the translations containing few departures from the original. The idea of Virgil as a Christian prophet, which is so elaborately developed in the Liège chronicle, is entirely wanting in the popular version, and so are many of the other wonders which the chronicler had gathered together from every direction. On the other hand, some parts of the legend are much more freely handled.

Here closes the long list of the strange and various vicissitudes of Virgil's fame, down to the end of the middle ages. After the sixteenth century the Virgilian legend disappears, and the memory of it is only kept alive by students; for the power of credulity tottered and fell before the rising light, the irresistible advance of reason and criticism, before the philosophy of experience which prescribed the only true road to a knowledge of truth. After the middle ages the Virgil legend was only kept alive by oral tradition in its native home in Naples and Sicily, and there, too, it is now extinct. A young Neapolitan scholar, a diligent student of folk-lore, has assured Comparetti that he has never met with any traces of it, though the latter believes himself to have discovered something of the kind amongst the people in the vicinity of the Grotto of Pozzuoli and in other places in the south of Italy; while the following love song was heard not long since by a friend of Comparetti, sung by a peasant girl near Lecce:—

"Diu! ci tanissi l'arte da Vargiliu!
'Nnati le porte to'nducia lu mare,
Ca da li pisci me facia pupillu,
'Mmienzu le riti to' enia 'ncappare;
Ca di l'acelli mę facia cardillu,
'Mmienzu lu piettu to' lu nitu a fare;
E suttu l'ombra de li to' capilli
Enia de menzugiurnu a rrepusare."

(Dio! ch'avessi l'arte di Virgilio! Innanzi le porte tue condurrei il mare. Perché tra i pesci mi farei un pesciolino.—In mezzo alle reti tue andrei incappare.—Tra gli uccelli mi farei un cardellino.—In mezzo al tuo petto il nido a fare.)—E sotto l'ombra dei tuoi capelli—Andrei di mezzo giorno a riposare.)

Here ends the second section and volume of the work before us, which examines with exhaustive learning every side of the subject to which it is devoted. It has only been possible here to indicate shortly its principal results, without dwelling on details, such as the particular actions and prodigies ascribed to Virgil as a magician, the origin of which is in each case carefully investigated by the author. But enough must have been said to prove the scientific

value and the interesting character of the whole. We must not omit to mention that the author has reprinted at the end of his second part all the original passages in Latin, Italian, French, and German writers which refer to Virgil as a magician, and are either of importance for the subject or not easily accessible (as for instance the whole of the popular French book, *Les faits merveilleux de Virgille*), and for this, too, we must be grateful. If the treatment is sometimes more diffuse than might have been wished, and the author has not always avoided digressions and repetitions, these are but slight blemishes in comparison with the solid merits of the work.

FELIX LIEBRECHT.

Intelligence.

Dr. O. Donner has published, at Helsingfors, a very modest but complete history of Finnish philology, with a bibliographical summary. An account of it is given by M. Sayous in our excellent contemporary, the *Revue Critique*, for January 18th.

Contents of the Journals.

Zeitschrift der deutsch. morg. Gesellschaft. Vol. xxvi. Nos. 3 and 4.—Himyaritic inscriptions explained by F. Praetorius; with fac-similes—Indian medicine; Caraka; by R. Roth. [Translated extracts.] Contributions to the explanation of the Avesta, by Hübschmann. From Dschâm's love songs, by F. Rückert. Decipherment and explanation of the Armenian cuneiform inscriptions of Van and the neighbourhood, by A. D. Mordtmann. [Ingenuous and exhaustive, but unsatisfactory. It is clear that the explanation of the inscriptions cannot be sought for in Armenian or any other Aryan dialect. But the paper is an indispensable foundation for future researches. The mutilated inscription I. is written in Assyrian, not Armenian as Dr. M. assumes.] Towards the explanation of the Avesta, by F. Spiegel. [Answer to Roth.] On the latest Moabitish discoveries; account of journey by L. Weser, of Jerusalem. On the Saptacatakam of Hâla, by A. Weber. Himyaritic contributions by F. Praetorius. Hebrew etymologies; by G. M. Redslob. On the verb פָּרַס, by Dr. Zunz.

Linguistic matters from Muhammedan mystic literature, by I. Goldziher. New Moabitish discoveries and riddles; third report, by K. Schlottmann. Linguistic remarks on Wright's Apocryphal Acts, by Dr. Geiger. Notices and correspondence. Notes of the Oriental MSS. of the Mediceo-Laurentian library at Florence, by Fausto Lasinio. [Corrections of Assemani and Biscioni.] The poet Niculo, by Siegf. Goldschmidt. More about alphabetic and acrostichic hymns of Ephrem, by G. Bickell. Reply to Dr. Schrader, by J. Oppert. [On the question whether the list of Assyrian eponyms is complete or not, and whether the chronology of the Books of Kings can be maintained.] Extracts from letters of Drs. Schlottmann, Magnus, and Harkavy. [Rödiger agrees with Schlottmann as to the genuineness of the Moabitic inscriptions explained by the latter.] Jäschke's *Handwörterbuch der tibet. Sprache*, rev. by Schlagintweit. Thorbecke's edition of Hariri's *Durrat al-Gawwâs*, rev. by Socin. Martin's *Œuvres grammaticales de Bar-Hebraeus*, rev. by Nöldeke.

Philologischer Anzeiger.—Vol. iv. Parts IX. and X. The most important works noticed are:—*Corpus Inscriptionum Latinarum*. Vol. v. p. 1., ed. Th. Mommsen.—*Sterio*, Bemerkungen über den Gebrauch von *idēu* in Homer. [Attempts to distinguish the Act and Mid. senses.]—*H. Duntzer*, Kirchhoff, Köchly, und die Odyssee.—*H. Thiele*, Prolegomena ad hymnum in Venerem homericum iv. [Gives a very probable view of the date and local associations of the poem.]—*H. Berger*, Die geographischen Fragmente des Hipparch. [Lays the foundation of a correct estimate of the relation of Hipparchus to Eratosthenes and Strabo.]—*T. Mommsen*, Bemerkungen zum 1. Buch der Satyren des Horaz.—Cornelius Tacitus, a *C. Nipperdeio* recognitus. P. 1.—*C. Bücher*, Quaestiones Amphictyoniarum specimen.—Lucianus Samosatensis. *Fr. Fritschius* recensuit.—*Jul. Sommerbrodt*, Lucianea.—*Procksch*, Gebrauch der Nebensätze bei Cæsar.—*Ad. Franz*, M. Aurelius Cassiodorus.—Gerb. von Rath, Ein Ausflug nach Calabrien. [Many illustrations or traces of classical antiquity.]

Curtius' Studien zur Griechischen und Lateinischen Grammatik (Hirzel: Leipzig) v. 2. opens with a lengthy article "De titulorum ionicorum dialecto." Brugman's discussion of the physiology of the letter *r* in the Indo-European languages is highly instructive as far as it goes. The article "De sonorum affectionibus quæ percipiuntur in dialecto Neo-Locrica," by a young Locrian of the name Chalkiopoulos, is a valuable contribution to our knowledge of modern Greek, though his notions of comparative philology are rather crude. The writer on Roman proper names in *a* is wrong in thinking that the old Irish *corpimagas* goes with Latin names in *a* and not with the masculines in

us. Prof. Hadley's paper on Greek accentuation, though published before, still deserves to be pointed out as containing the newest and most rational account of the subject ever given; possibly in a generation or two his views may find their way even into the most conservative of our public schools. The editor republishes a paper of his own on aoristic forms discovered in Latin: among others the following are pointed out in early Latin:—tago, tagam, tagit, attigas fuat, attulat.

New Publications.

- HALÉVY, J. Rapport sur une mission archéologique dans le Yémen. (Contains the text of 680 inscriptions, with the translation of more than 200 of them) Paris.
- LENORMANT, F. Études accadiennes. Deux parties. Paris: Maisonneuve.
- WESKE, M. Untersuchungen zur vergleichenden Grammatik des Finnischen Sprachstammes. Leipzig: Breitkopf u. Härtel.
- WHITNEY, W. D. Oriental and Linguistic Studies. New York. 1873.

ERRATA IN No. 65.

- Page 46, col. 2, midway, for "King's" read "Queen's."
- " 48, " 1, CONTENTS, line 5, for "Djahid" read "Djalud."
- " 48, " 2, line 4, for "Græca" read "Græce."

THE ACADEMY.

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VOL. IV.—No. 66.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Saturday, March 1, and Advertisements should be sent in by February 25.

Chief Assistant in the Observatory, Cape of GOOD HOPE. An open Competition for one situation will be held in London on the 18th March next, and following days. A Preliminary Examination will be held in London, Edinburgh, and Dublin, on Tuesday, 11th March. Candidates must be between 18 and 25 years of age. Application for the necessary form should be made at once to the Secretary, Civil Service Commission, Cannon Row, London, S.W.

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No. 67.]

REGISTERED FOR

SATURDAY, MARCH 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature and Art.

Madame Récamier et les Amis de sa Jeunesse. Par l'auteur des
Souvenirs de Mme. Récamier. Michel Lévy. 1872.

THIRTEEN years ago, when Mme. Lenormant, the niece and adopted daughter of Mme. Récamier, published two volumes of *Souvenirs et Correspondances tirés des Papiers de Mme. Récamier*, there were still amongst the living some who had felt the power of her strange fascination, and many with whom the tradition of her sway was fresh. M. Guizot, who then tried (in the *Revue des deux Mondes*) *de faire comprendre cette personne si belle et si rare, plus rare encore que belle*, and who now is almost the only survivor of those whose names meet us in the present volume, might not unnaturally doubt whether a generation which knew not Juliette would have any interest to spare for these last gleanings from her *Correspondance intime*. This volume, however, shows us a side of Madame Récamier's character which, though not exactly new, gives a new explanation of her unparalleled social power. In 1812 she spoke of being forgotten by her friends, and the Comtesse de Boigne, one of the earliest and most constant amongst them, writes in answer: "Je crois votre crainte mal fondée. Vous êtes la personne la moins oubliée, et ce n'est pas parceque vous êtes bonne, douce, facile.....ce qui vous rend si séduisante, c'est votre bonté. Peut-être suis-je la seule qui ait osé vous le dire; il paraît si bizarre de louer la bonté de la plus jolie femme de l'Europe!.....c'est parceque vous êtes bonne que vous avez fait tourner tant de têtes et désespéré tant de malheureux; ils ne s'en doutent pas, mais c'est pourtant vrai." The letters which Mme. Lenormant has at length made up her mind to publish fully confirm this view. Mme. Récamier was "bonne"—fundamentally kind—to old and young, rich and poor, ministers and exiles, to men, women, and children, to the septuagenarian Châteaubriand, to the boy Ampère, to the little niece whose happiness was to be her consolation; and all repaid her disinterested friendship with a devoted attachment almost too absorbing and passionate to bear the same name. If she started on a journey alone her friend's uneasiness was calmed by imagining her at once "l'idole des postillons, et la meilleure amie des maîtresses d'auberge;" and it would not have

occurred to any of the privileged circle of l'Abbaye-au-Bois to smile, except sympathetically, when J. J. Ampère, newly admitted to the society, and nineteen, falls on his knees exclaiming, "Ah! ce n'est pas pour elle!" when Madame Récamier (at forty-three) gave him a gentle hint not to fall in love with her niece: they had all *passé par là*. No coquette ever carried the art of pleasing to a higher point of perfection; but except perhaps in her very earliest social triumphs, Madame Récamier aimed at pleasing, not from vanity, not to satisfy her own affections, but out of pure charity and philanthropy; and for this reason it seems ungracious, and even in questionable taste, to speculate, as her countrymen are fond of doing, whether she ever actually experienced "ce sentiment passionné, exclusif, incomparable, qui s'appelle l'amour, et qu'elle a inspiré à tant de gens." A professional philanthropist learns to know human nature too well to have illusions or disenchantments, except about the species; and from these, with their attendant melancholy, Mme. Récamier was not exempt.

The present volume is divided into three parts, of which only the last appears too long. In the first, we have the letters to and from Mme. Récamier and her most intimate friends, written in the first twenty years of the century. The editress thinks it necessary to apologize for the use of Christian names throughout the correspondence. All her life Mme. Récamier was *Juliette* to her intimates, and at this time Camille (Jordan), Mathieu (de Montmorency), Adèle (de Boigne), Benjamin (Constant), Prosper (de Barante), with a few others of the same coterie, agree in dropping all formalities of style, titles, &c. Men afterwards famous were the better for the habit (if would have done Châteaubriand good to be plain François for a space), and it was protected from abuse by the instinctive exclusiveness of a picked society: it may have been merely a reminiscence of the fashions of the revolution, and a protest against the revival of courtly forms by the Consul-General, but the effect was undoubtedly pleasant. Mme. Récamier's letters, for instance, to "cher Camille" are generally short, not eloquent, not brilliant, containing no news, no scandal, not so much as a *bon mot*; if they had been numerous it would have been rash to publish them; but as simple statements of friendly affection or sympathy, varying with the circumstances of the writer and the person so unaffectedly addressed, and

always marked by the most perfect tact, they do more than M. Guizot's analysis to explain the nature of her almost unique talent, if indeed genius would not be a more fitting word for it. We have no exact equivalent for the idiom *facile à vivre*, as Dr. Johnson's "clubbable" would lose its force wherever the *salon* was an institution; but Mme. Récamier had undoubtedly the genius of living: social life, viewed absolutely, apart from the opinions, the employments, the minor affections (Mme. Récamier never lost a friend through marriage) of its members; the exchange of entirely personal sentiments, of what may be called secondary convictions, the elaboration of a running commentary on the less grateful realities of existence, an enchanted shadow or reflection, like the Lady of Shalott's, of the outer world—this was Madame Récamier's kingdom, and her grateful subjects wondered that she was not satisfied with ruling it. The expressions of discouragement which fell from her occasionally in society, which it was against her principles to sadden even when least cheerful herself, are the rule rather than the exception in her confidential letters to the "*chère enfant de mon cœur*," for whom she tries to plan a happier if a less brilliant destiny than her own. If ambition had been her ruling passion it would be easy to account for her discontent as the satiety of conquest, the craving for new worlds of admirers. M. Guizot (in 1857) thought that she might have been happy if Châteaubriand had been some one else, and she had known him earlier in life; other critics meet the difficulty by insinuating that her heart was cold, and that women are made for love, not friendship. But it must have been a warm, and indeed an insatiable, heart that could not be satisfied with Ballanche's life-long devotion, Mathieu de Montmorency's grave affection, Ampère's faithful worship, and such adoration as the hero of *Memoires d'outre Tombe* had to spare for any heroine at all; to say nothing of the crowds of lesser admirers whose passion might wear out in a quarter of a century or less. Madame Récamier was a very clever, as well as a very pretty and a very charming woman, and it is possible that the void, the something wanting of which she was dimly conscious, whenever not pre-occupied with an exacting friendship, was intellectual rather than moral. Though banished on political grounds by Napoleon, she can scarcely be said to have had any political principles, except personal dignity and fidelity to friends whatever their way of thinking. Though perfectly intelligent and ready to sympathize with whatever study was occupying her courtiers, she was so far from any natural literary bent that Lemontey could write to her, when banished from Paris: "*J'en veux à tous ces imbéciles de profession qui font des livres, de n'avoir pas mis au jour un seul ouvrage que jé puisse vous envoyer avec la certitude qu'il vous intéresserait.*" Even in friendship she was not a fanatic, and her judgment was never clouded by her affections. All these were so many conditions of her social success. As a political enthusiast, an *esprit fort*, or a *cœur sensible*, her empire would have been limited to a fraction of society, instead of including all its most brilliant elements. But social distinction does not seem to have been a passion with her, and though she spent her life in commanding it, it did not supply her with the absorbing interest which she might have found in pursuits more or less unfavourable to its attainment. In fact, she was probably the victim of her genius; it was her destiny to *tenir salon*, and wherever she was, in an hotel at Paris, in her "cell" at l'Abbaye au Bois, in the meanest country *auberge*, a few magic touches, and the mere fact of her presence, turned those present into a perfect *société*, which, having met once, was sure to wish to meet again. But while Madame Récamier charmed all the world, who was to charm Madame Récamier?

Like other and greater geniuses, she did not always find the consciousness, nor even the exercise, of her powers sufficient for happiness.

The second part of the book is taken up with Mme. Lenormant's recollections of her aunt, and the letters exchanged during their short absences or after the former's marriage. It was an education of a thousand, for the child was allowed in the famous *salon* from the first, while her studies were looked after by all the *amis de la maison*. She tells an amusing story of the weekly themes she used to write for Mme. de Genlis, and how one day having lost her way in a sentence, Lemontey came to her aid and finished it; when the theme came back corrected, a marginal note, "*cette phrase manque de jeunesse*," testified to the acuteness of the *ne plus ultra* of governesses. The third part, relating to Madame Récamier's intercourse with J. J. Ampère, appears disproportionately long, because Ampère is already sufficiently well known from other sources, and few of his friend's letters seem to have been preserved. The absence of letters to or from Ballanche is explained by their being reserved for publication in a new and complete edition of the works of that writer, who is much admired by the very few who read him. EDITH SIMCOX

(H. Lawrenny).

Ewald's *Scottish Woman at Tjele*. [*Den Skotske Kvinde paa Tjele. Livsbillede fra Reformationstiden af H. F. Ewald.*] Copenhagen: Hægel.

A GENUINE picture of the customs and household life of a country is always a hundredfold more valuable than the cursory notes of a mere tourist. Consequently when a foreign novelist who is really national succeeds in attracting attention away from the fatherland, when, that is, the individuality of the writer is strong enough to enforce respect, he is sure of appreciation in all communities where there is largeness of sympathy and breadth of vision. The works of Frederika Bremer and Tourgenieff have taught us here in England more about life in Sweden and Russia than many sensational books of travel could do, and it is just when these authors are most national that they are most delightful. Without claiming for Ewald a place beside the distinguished names just quoted, we may safely say that he is the most individual and characteristic romancist that Denmark has produced. It is noticeable that in Denmark, where they do so many things well, they do not tell a story very forcibly. The novelists *in posse* find a readier field for their talents on the boards of the very well sustained and enterprising theatres. Ewald's name is not quite unknown over here; his first important book, *Valdemar Krones Ungdomshistorie*, had some success in England when it appeared in translation, in 1867, as *Waldemar Krone's Youth*.

Between *Valdemar Krone* and the book before us lies a goodly series of romances, all scenes from Jutland and Zealand, and all lingering lovingly over the features of sober middle-class life in Denmark, all picturesque, quiet, and tender. To enter fully into the charm of such a book as the *Scottish Woman at Tjele* one must have been in Denmark and among the Danes, and know their country a little. One is transported to the desolate lakes in Jutland, where the water reflects all the silent beauty of the great beech woods, broken only by the wild duck leading her troop of ducklings, or the sudden whirr of the white egret from the reeds upon the shore; and again, one is treading the vast flat sands of the western islands, watching the foam and curl of the long white waves, and picking shells and amber from the shore; and yet again one is assisting at some queer ceremony of bygone times at an old baronial hall,

deep in the blowing woods. And the characters are like the landscapes that surround them, they are fresh and pure and vigorous, lads blue-eyed and yellow-bearded, and lassies flaxen-haired and rosy, even as one may see to-day in any Zealand village.

The *Scottish Woman at Tjele* is a story of more than 300 years ago. It deals with the time of struggle between the new Reformed faith and the old effete Popery. Denmark was in a condition of anarchy. Frederick I. was just dead, and his son and successor, Christian, was not only not crowned king, but not even in possession of the country; the Hanse Cities were raising the banner of the imprisoned king, Christian II., and the clouds that afterwards fell in rain of blood were closing over the land. Meanwhile the Protestant religion was fighting a bloodless war against the old faith, and popular feeling was already half upon its side. The story turns upon the condition of Mistress Mogens, a Scotch woman, of the family of the Grahames, who had married a Danish nobleman, Mogens, in Scotland, and come out to live with him at Tjele, his estate in Jutland, near Viborg. In the process of years her husband becomes weary and jealous of her, and slights her publicly, and an old scandal, which whispers that they have never been married at all, is carefully cultivated by all the relatives to whose interest it would be to oust her and her two children. The peasants, who consider that she has the power of witchcraft, and look upon her with suspicion, call her always the Scotch Woman, and hence the name of the book. It is impossible to give a sketch of the plot in our narrow limits; it is exceedingly well conceived and sustained, and depicts the sorrows and shames of the poor alien woman, scorned and dishonoured in her own house, and the injuries which the suspicion works for her two children, a boy and girl of proud and noble natures, and more brilliant impulses than most of their companions. A very fine sketch is that of a young Reformed noble, who is betrothed to Margaret, the Scotch Woman's daughter. At last the honour of the family is cleared, and the various love-threads are disentangled and drawn duly together at the end. But to most non-Danish readers the great value of the book will consist more in its antiquarian and historical details than in the mere story. The time was perhaps the most important, though not the most showy, in the history of the people. The independence of Denmark, the very coherence of its component parts, hung in the balance; a touch might have decided against prosperity. All the great political, social, and religious struggles of Danish thought of the time are lucidly and powerfully sketched in this book; and, on the other hand, the detail of life and custom, the *minutiae* of architecture, and ornament, and dress, are given with gusto and manifest fidelity. Ewald has the picturesque manner of a painter in describing; his scenes remind one of the works of that excellent Danish artist, Exner, whose pictures, unfortunately, are little known out of Scandinavia; there is the same warm colour, soberness of sentiment, and untiring accuracy of detail.

Herman Frederik Ewald was born at Copenhagen in 1821, but it was not till 1859 that his first great work appeared. Thackeray was hardly so old when *Vanity Fair* was published. From a quiet and happy home in the south of Jutland the unknown novelist sent *Valdemar Krones Ungdom*, and its success was as sudden and lasting in the little reading world of Denmark as that of *Vanity Fair* was in our wider arena at home. The warm reception of the first book encouraged Ewald to continue, and as he has been too wise to damage his reputation by hasty writing, but has gained every year in polish and force, he has met with the reward that is due, and reigns now quite undisputed

as the first of Danish novelists. *Valdemar Krone*, the least mature of his works, found favour amongst us in a translation; it is greatly to be wished that some one with the time to spare would give us a translation of *Den Skotske Kvinde paa Tjele*. It is sadly wanting in bigamy and murder, but it contains fresh and healthy elements that some of us may consider quite as precious as these.

EDMUND W. GOSSE.

LORD LITTMASS AND LORD LYTTON.

To the Editor of the ACADEMY.

SIR,—The writer of your notice of Lord Lytton (February 1) is not alone, I find, in supposing that the character of "Lord Littmass" in *Higher Law* was intended as a sketch of the great novelist. Will you allow me, as author of the book referred to, to say that, while I agree most heartily in reprobating personalities, and abhor the ruffianly excesses in that direction of a certain portion of the press, I had no intention whatever of being personal in the sketch in question. If there be any coincidence such as that alleged, I am truly sorry for it, and not least for the sake of a writer whom I have ever held in high esteem, and whom I should be sorry to have to rank so low in the moral scale as my "Lord Littmass." But I assure you positively that any coincidence is purely accidental. The name was based solely upon the chemical test-paper called *litmus*; and the character, which was designed to represent one whose actual life would not stand being judged by the test of his own written principles, was built up step by step with reference to nothing but the requirements of the situation and consistency with itself. Such coincidences may, if you please, constitute a "curiosity of literature;" but even so, there is a yet further coincidence and curiosity in the fact that both the real and the imaginary characters died suddenly, and pen in hand. I trust that the impossibility of there being any design in this latter coincidence will help to acquit me of a like design in the former.—I am, yours obediently,

THE AUTHOR OF "HIGHER LAW."

Perhaps Lord Lytton's paper on Literary Clairvoyance, in *Caxtoniana*, may suggest a solution of such a problem as these "coincidences" seem to involve.

NOTES ON LITERATURE AND ART.

Mr. Gerald Massey writes to us to complain that Mr. Symonds in reviewing Herr Krauss' translation of Shakespeare's Sonnets, leads readers to suppose that Mr. Massey has identified H. W. in the dedication with W. H., whereas the latter has written 700 pages to prove the difference of Henry Wriothesley and William Herbert. We regret that we cannot print Mr. Massey's letter in full—but we are glad to receive a reply from Mr. Symonds, apologizing for his unintentional inaccuracy on this point, which arose from his having read Mr. Massey's book a long time ago, and not at present possessing a copy of it.

The French Government has resolved not to take any share in the London International Exhibition of the present year, wishing to reserve all its resources for the "grand solennité autrichienne."

The first concert of the Wagner Society took place, on the 19th February, at Hanover Square Rooms, before a large and enthusiastic audience, amongst whom were many of the musical celebrities. The aim of these concerts is to familiarize the English public with the works of Wagner preparatory to the performance next year of the Nibelungen Tetralogy at Bayreuth, and so to encourage the English to lend their support to that extensive enterprise. The orchestra was conducted by Mr. Dannreuther, to whose credit it should be said that he succeeded in satisfying, after but a single general rehearsal, the intellectual and technical requirements of compositions in great measure new, and at the same time enormously difficult. The rendering

was all but perfect, and in spite of the smallness and unfavourable conditions of a concert room, compared favourably with the stage representation of the "Flying Dutchman" at Drury Lane in 1870. At every moment one felt the want of scenery and dramatic action to bring out the full effect, although there was of course some compensating advantage in engaging the attention of an English public by purely musical means. The single point which we would recommend to the attention of the distinguished conductor is whether there was sufficient repose in the opening bars of the introduction to "Lohengrin," and in the first appearance of the Graal motive. The only vocalist Herr Franz Diener, who has been selected by Wagner to take the part of Siegfried next year, met with a most favourable reception, and his rendering of the "Liebeslied" from the "Walküre" was encored. He has a beautiful tenor voice and an essentially dramatic style of declamation, though we occasionally missed the smoothness and freedom from guttural intonation which is so rare even amongst the best representatives of the German school of singing.

The programme, which was intended to indicate the gradual development of Wagner's peculiar genius, will be repeated at the next concert. This is an exceedingly sensible arrangement for those who desire to study Wagner. Upon the whole we may say that the new music seems at last thoroughly to have taken hold of an English audience; and we have no doubt that the success that we wish the movement will be realized. The tickets of the succeeding concerts will be reduced to the ordinary price.

The Hungarians who claim Albert Dürer as a countryman appeal in evidence to the arms used by the painter, and known through his portraits, which are the same (a gate, *ajtó*, with steep roof and open doors) as those borne by the noble family "Ajtósi-Ajtós." Dürer's father, it is argued, must have prided himself on his extraction to continue the use of arms after sinking to the condition of a workman.

The papers mention the discovery at Athens, near the Temple of Jupiter, of two fine but headless statues of Æsculapius and Hygeia, ascribed to the age of Hadrian.

The new number of the *Archæologische Zeitung* (N. S. V., pt. 3, p. 72) contains a short article by Professor E. Curtius on the sculptured drum of a column from the Temple of Diana at Ephesus, and now in the British Museum. From so high a quarter we would naturally expect some new light on two points which have caused much perplexity among those to whom it is the custom to turn in the first instance for explanations in matters of this kind. These points are, the meaning of the subject represented on the drum and the exact merits of the sculpture. As regards the subject, however, the learned Professor neither attempts to explain it as a whole nor recognizes with any degree of confidence the individual figures, always excepting the Hermes, about whom it is impossible to disagree. The winged youth on the left, who has had so many names since his arrival here, and none more plausible, as we think, than that of *Thanatos*, as proposed by a writer in the *Saturday Review*, may represent, according to Curtius, *Agon*, a kindred figure to Eros. But *Agon* has not hitherto been found wearing a sword, and that is precisely where the difficulty occurs in all the interpretations that have been suggested except that of *Thanatos*. On the merits of the sculpture we are told little beyond this, that the figure of Hermes resembles in style the work of Lysippos, and that the sculpture generally is not unworthy of the school of Scopas. On this point, however, we are less impatient, as some further discoveries have lately been made by Mr. Wood, which, it is said, will contribute very valuable assistance in determining the position of these Ephesian sculptures relative to the other surviving monuments of Greek art. The principal interest of the article lies in the historical sketch which it gives of how the learned have blundered over the interpretation of the words *columnæ coelatae una a Scopæ*.

Dr. O. Eisenmann, in an article in the *Beiblatt zur Zeitschrift für bildende Kunst*, calls the attention of his readers to certain little red marks about the size and shape of wafers

that they may have noticed on many of the pictures in the old Pinakothek at Munich. He had the curiosity to ask what these marks meant, and found to his surprise that they pointed out those pictures that were to be rescued first in case of a fire, those, in fact, which were considered most valuable. This seems a useful precaution that might well be adopted in other galleries, but Dr. Eisenmann expresses great indignation at the way in which the protecting providence that watches over the Munich pictures has directed its operations. Many of the elect he considers are scarcely worthy of being saved, whilst some that are consigned to the flames deserve a better fate. Of course such an exercise of predestinating power demands the utmost knowledge and judgment, and the fiat should only be issued by a body of well qualified judges; but it does not seem a foolish notion that some recognized order of salvation should be followed in the event of a fire at a large picture gallery.

We hear that an international exhibition of the works of the old art of the Netherlands is projected, to be held at Brussels in 1874. Special exhibitions of this kind are most valuable to the art student as bringing together all the more important works of a master or a period. This one, no doubt, will have especial interest from the fact that recent researches have thrown much new light on the history and work of the old masters of the Netherlands, whose painting will form the chief portion of the exhibition. Several English picture owners, the Queen among the number, have promised to contribute.

The *Zeitschrift für bildende Kunst* of February 14, opens with a long article on the Bethnal Green Museum, by G. Gutenberg. Only the paintings of the Italian school are noticed in it, for the article is not finished, but will be continued in other numbers. The critic points out that the charming Madonna and Child ascribed to Leonardo da Vinci, but whose history the catalogue is "too discreet" to give, is probably a painting that was formerly in the collection of the Earl of Northwick, and then assigned to Domenico Ghirlandajo. His reason for thinking this is that Dr. Waagen does not speak of this work in his account of the Hertford Collection in the "Treasures;" but in another place he warmly claims for Leonardo the before-named Ghirlandajo of the Northwick Collection. This collection was sold in 1859, and very possibly the picture might then have passed into the hands of the Marquis of Hertford. If so, it is one of the great title-giver Dr. Waagen's advancements to honour. Prof. Gutenberg considers that the advancement was merited.

In a manuscript codex preserved in the library at Wolfenbüttel some remarkable sketches have been discovered, apparently the work of an Italian master of the thirteenth or beginning of the fourteenth century. These sketches, three of which are reproduced in the *Zeitschrift für bildende Kunst*, are not the work of an illuminator, but point to a master who was accustomed to large and dramatic compositions, and who appears to have had some knowledge of antique art. There is certainly more nature and motion in his figures than is usual with the masters of the Byzantine Italian school. The sketches, pen drawings with the shadows somewhat darkened with Indian ink, were apparently made before the manuscript was written. It is supposed that some learned writer made use of the blank leaves of an artist's sketch-book as writing material.

MM. Leighton, Mateijko, and Dauban have been named corresponding members of the Académie des Beaux Arts in place of the late MM. Schwin d'Aligny and Bodiner.

Three new rooms in the Louvre have recently been opened to the public. These rooms are devoted to the large works of Reubens, Van Dyck, Sneyders, Gaspard de Crayer, and other masters of the same school which, in consequence of the late alterations, have been displaced from the great gallery.

The *Chronique des Arts* tells us that the "event of the season for the artistic world of Vienna" has been the sale of the ancient and modern paintings in the collection of M. Sedel-

meyer. Among the modern paintings, the highest price was realized by a Meissonier, "Gentleman of the time of Louis XIII.," 20,000 fr.; while of the old masters, Ruysdael's "Forest of Oaks" was sold for 44,000 fr., and "A Flemish Interior," by Teniers, for 36,000 fr. There were no important Italian works in the collection.

A new magazine for children, with the title of *Deutsche Jugend*, has appeared in Germany. The illustrations are chiefly by Oscar Pletsch, the most charming delineator of child's life.

New Publications.

- BRÜLL, A. Trachten der Juden im nachbiblischen Alterthume. Ein Beitrag zur allgem. Costümkunde. 1 Thl. Frankfurt am Main: S. Goar.
- DASENT, G. W. Jest and Earnest. Chapman and Hall.
- JÄHNS, F. W. Carl Maria von Weber. Eine Lebensskizze. Leipzig: Grunow.
- KINGSLEY, C. Plays and Puritans. Macmillan.
- MEISSNER, J. Untersuchungen üb. Shakespeare's Sturm. Eine historisch-philologische Abhandlung. Dessau: Reissner.
- OVERBECK, J. Griechische Kunstmythologie. Besonderer Theil. 11^{ter} Bd. 1ster Thl. 2 Buch. Hera. Leipzig: Engelmann.
- RICHTER, J. W. OTTO. Deutsche Dichter des mittelalters im Kampfe für den Kaiser gegen den Pabst. (Pamphlet.) Cassel: Kay.
- SCHMIDT, JULIAN. Neue Bilder aus dem geistigen Leben unserer Zeit. 3 Bde. (Shakespeare u. seine Zeit—Gervinus—Willibad Alexis—Herman Grimm—Spielhagen—Fritz Reuter—Maur. Jókai—Pisemski.) Leipzig: Duncker u. Humblot.
- SUTERMEISTER, O. Kinder u. Hausmärchen aus der Schweiz. 2te verm. Aufl. Aarau: Sauerländer.
- THE ANTIQUITIES OF CYPRUS. Collection of Gen. di Cesnola. Photographed by S. Thompson, with Introduction by S. Colvin. London: Mansell.
- THORNTON, W. Old-Fashioned Ethics and Commonplace Metaphysics. Macmillan.
- VAN MAERLANT, J. Spiegel Historiae. 11de Partie. hrsg. von F. v. Hellwald. Leipzig: Richter u. Harrassowitz.

Theology.

The Pentateuch and Book of Joshua Critically Examined. By the Right Rev. John William Colenso, D.D., Bishop of Natal. Part VI. London: Longmans, Green, & Co. 1871.

It must be an inveterate prejudice indeed which can withstand the accumulated evidence of the mature character of Bishop Colenso's criticism presented in this and the preceding part of his work. The slightly naive realism of the first volume, the obviousness of much that was advanced in the succeeding parts, are now exchanged for a comprehensiveness of treatment and an assured grasp of the subject, which the unfavourable circumstances of a bishop in a distant colony scarcely entitled us to expect. This is the least acknowledgment which liberal and liberal-conservative critics both in England and Germany owe to the author. Some, however, and among them the present writer, will not be satisfied with such a slender recognition. Those who have received their first introduction to the historical criticism of the Scriptures from a German source, and have followed the development of the Pentateuch controversy principally in German monographs, may be excused if they are surprised into a warmer expression of gratitude to the English author of the (in some respects) greatest work as yet produced on the subject. It may be hoped that our German friends, to whom we are indebted for so much stimulus and sympathy, will more and more abandon their attitude of comparative isolation, and recognize the international character of biblical criticism. In a subject which has suffered so much from the disturbing influences of imagination or tradition, a constant interchange of thought between students of various schools is more than usually necessary. At any rate, a writer who is so scrupulously just to others as the Bishop of Natal, deserved a less disparaging treatment than

he has lately received from two well-known German scholars, Dr. Delitzsch, of Leipzig, and Dr. Merx, of Tübingen.

A work which pre-supposes such a multitude of special researches cannot be criticized in detail within the limits of a comprehensive journal like the *Academy*. There can, I think, be little doubt that the most important results of the Bishop and his allies (Graf, Kuenen, and Kalisch) will be confirmed by an increasing number of critics, though theological prejudices in England, combined in Germany with prepossessions induced by a long critical tradition, may for some time retard the conclusion. (Cf. notice of Kalisch's *Leviticus*, *Academy*, vol. iii., p. 248.) The main lines of the argument are all that I can attempt to give here. The first point established by the Bishop is that Lev. xviii.—xxvii. were written during or after the Babylonian exile. The proofs of this have been given sufficiently by Graf (*Die gesch. Bücher des A. T.*, p. 75, &c.), whose view as to the partial authorship of Ezekiel has, I think, been victoriously asserted by the Bishop in Appendix §124 and 125 against Kuenen and Nöldeke. Dr. Kalisch's somewhat dogmatic remarks on Lev. xviii. do not affect the Bishop's arguments. This result at once suggests the inquiry whether other portions of the middle books of the Pentateuch may not have been written during the same period. It is important that we have a fixed point to start from in the well ascertained date of Deuteronomy (*i.e.*, the seventh century, B.C.), the main part of which (chaps. v.—xxvi., xxviii.) contains a number of references to the facts related in Exodus and Numbers, proving that the writer was acquainted with something closely resembling the present narrative. On the other hand, he offers a direct contradiction to the account of the making of the ark in Exodus, which would have been impossible if he had had that record before him. This involves the late origin not only of Ex. xxv.—xxx. 17, xxxv.—xl., but of all those passages of Leviticus and Numbers which refer explicitly or by implication to the contents of those chapters. The author next points out the passages of later legislative origin in Num. xi.—xxxvi., Deut. xxxi.—xxxiv., Joshua, and Exodus, noting also those parts which belong to the older narrative and the Deuteronomist-editor respectively. The "original story" in Exodus, Numbers, Deuteronomy, and Joshua is given at full length, and a series of notes, in which Keil's counter-arguments are examined. (See especially chap. xx., on the origin of the Passover.) The date assigned to the later legislative passages is confirmed historically by a great variety of details, which would no doubt have gained much had the second part of Dr. Kalisch's *Leviticus* been accessible to the author, with copious references to Keil on the conservative and Graf on the liberal side. Ezra, "the scribe," is indicated as the collector, and probably to a large extent the writer, of most of these later passages, though the process of revision, and even to some extent of composition, was not finished till afterwards. (Cf. Dr. Kalisch's conclusion, *Leviticus*, Part ii., pp. 637-639.) This is the thread of Bishop Colenso's argument, and though the paragraph form in which it is displayed is wanting in elegance, it will probably be found extremely convenient to those who are beginning the subject, or are unwilling to be burdened with many books of reference. The conscientiousness of the author in excerpting the best standard works, such as those of Graf, Popper, Kuenen, and Keil, instead of serving up their contents as his own, cannot be too much respected.

The concluding chapters contain (1.) an inquiry how far the date assigned to the Jehovist in Part v. (which still seems to me too ancient) is borne out by the data contained in Exodus, Numbers, and Joshua; (2.) a statement of the author's views with regard to those Elohist narratives in Genesis

and Exodus which are unconnected with the Levitical legislation, in opposition to the earlier hypothesis of Graf on the one hand, and above all to that of Kuenen on the other; (3.) a sketch of the development of the story of the Exodus, chiefly after Kuenen; and (4.) a summary of the religious reforms in which criticisms like the foregoing may be expected to issue—a summary which one would have been sorry to miss, though it is here scarcely in its right place.

There still remains the Appendix, which has a value distinct in kind from the rest of the work. The tone of the latter has often an appearance of dogmatism, or rather of over-confidence in the power of criticism, which will be repellent to many readers. "Zwar weiss ich viel," it seems to say, "doch möcht' ich Alles wissen." The fault, so far as it exists, is amply redeemed by the thoroughness and circumspection of the phraseological analysis, with which no similar continental work can, so far as my experience goes, pretend to compare. It is difficult to single out examples where there is so much to commend, but I would especially call attention to the analysis on which the Bishop mainly founds his opinion that the Decalogue in Ex. xx. 1-17 is entirely due to the author of Deuteronomy (Appendix, p. 99, cf. in the body of the work, pp. 147, 168 top., and 608 foot.) That it is in no sense Mosaic had been already argued by Dr. Land (*Theol. Tijdsch.* iii., 359, &c.), who is answered, but not satisfactorily, by Mr. C. P. Tiele in his *History of the Egyptian and Mesopotamian Religions*, p. 564, note.

Hardly less important for the moment, though it would have found a fitter place in an international organ of criticism, is the Bishop's detailed examination of the rival hypotheses of Kuenen and Nöldeke. The arguments of the former scholar, to which the criticisms of the Bishop refer, are to be found in his *Religion of Israel* and the *Theological Journal*, now published at Leyden. I cannot refrain in passing from offering a tribute of admiration to the rare union of excellences in the former work, which compares not unfavourably in several respects with Ewald's more ambitious and brilliant *History of the People of Israel*, for even if it displays less psychological insight, and fewer of the intuitions of genius, it also presents far more of that careful scientific method which is too often conspicuous by its absence in the critic of Göttingen. The second volume, to which Bishop Colenso refers, seems to have as yet escaped the attention of any but Dutch reviewers. A cognate form of hypothesis, maintained in his last dissertation by the late K. H. Graf, was examined in an instructive essay in the *Studien und Kritiken* by Prof. Riehm, of Halle, but the objections urged by that very able critic only affect the position of Dr. Kuenen to a very slight extent. That position is, that the principal Elohim-record, generally called the *Grundschrift*, is continuous and self-subsistent (against Graf in his later stage), and that the whole of it, and not only, as Colenso thinks, the Levitical legislative passages, was composed during or after the Babylonian exile. If this view is tenable, one of our main sources of Israelitish tradition is cut off, for it is scarcely probable that Dr. Kuenen will undertake the task which his reviewer in the *Academy* (vol. iii., p. 12) suggested, "of analyzing these records, with the view of detecting still more ancient ones." The importance of this result justifies entering into somewhat more detail.

Bishop Colenso, then, begins by re-stating the grounds on which he holds the antiquity of the Elohist narrative in Genesis. His first point is that this narrative differs essentially from the Later Legislation in the last five books of the Hexateuch by its continuity. 1. The Jehovistic passages are not continuous, but were written to supplement the primary Elohist story. The proof of this is assumed from the previous volume. Appearances are in favour of its

correctness, but it should be sifted anew after the determination of the fresh questions which have arisen. 111. The stress laid upon Hebron, in the Elohist narratives, which points to a time when it "filled a conspicuous place in the history of Israel." (Kosters, *Theol. Tijd.*, vol. vii., p. 48, replies that the author was referred to Hebron by tradition, that it was the principal of the priests' cities, and that no city but Hebron had a claim to be so honoured, Shechem being obnoxious to a writer who lived after the exile, and Jerusalem being a comparatively modern name.) 1V. The suppression of the name Yahweh, previously to the revelation in Ex. vi. 2-5, is inexplicable in a later writer, who had before him the narratives of the Jehovist; and equally so is the insertion of Ex. vi. 2-5 by a writer who had before him the account in Ex. iii. 1-15. (But the Elohist may easily have had some method of harmonizing the discrepancy. And as for Ex. vi. 2-5, it was essential to the completeness of a record which *ex hyp.* was self-subsistent.) V. The form in which the notice of Hadar appears in *Gen.* xxxvi. 39, implies the hand of a contemporary of Samuel. (Cf. Ewald, *Gesch.* i. 113. The Bishop's view implies that the list of kings is defective.) VI. There appear to be references to these narratives in præ-exile books of the Old Testament. (True, but they are not always convincing.) VII. If *Gen.* ix. 4, belonged to the Later Legislation we should expect the formula, "He shall be cut off from his people," as in *Lev.* vii. 27, &c. VIII. There is no sign of priestly interest in the Elohist narratives; above all, no mention of sacrifice. (But, according to Kuenen, the latter circumstance arises out of the Elohist's favourite theory of the successive stages of divine revelation.)

The Bishop next passes to the arguments of Kuenen for a later post-exile origin of the debatable passages. The minuteness of the discussion is in proportion to the importance of the question. 1. "There is the unquestionable fact of a very remarkable resemblance in phraseology between these passages and the Later Legislation," from which the Leyden professor infers an identity of authorship. Bishop Colenso accounts for this fact by the veneration which late writers would naturally feel for the oldest monuments of their religious literature. And against it, as appears from an earlier passage (p. 583), he would set the facts—(1.) That almost all the expressions peculiar to the non-Elohist portions of Genesis appear in the Later Legislation or in the kindred prophecy of Ezekiel, and (2.) That the Later Legislation contains numerous formulæ which are entirely unknown to the Elohist in Genesis. 11. Another argument is drawn from the supposed priestly interest and artificial calculations of those narratives. For proofs of the former Kuenen refers to the institution of the Sabbath, *Gen.* ii. 1-3, the law of abstention from blood, *Gen.* ix. 4, and the law of circumcision, *Gen.* xvii. The Bishop remarks in reply that special prominence is given to each of these points either in the laws of the Original Story or the prophetic narratives written about the time of Samuel. The idea of the Sabbath in *Gen.* ii. is free from the sternness with which it was invested in the Later Legislation. (Cf. R. Martineau's paper, noticed in *Academy*, vol. iv., pp. 30, 48.) As for circumcision, it is rather assumed in the Later Legislation than anxiously enforced, as in *Gen.* xvii. The passages quoted as bearing a statistical character, so far as they are really Elohist, have nothing in them sufficiently artificial to preclude the possibility of a very early date. The view adopted by Kuenen, from Nöldeke, that the Elohist, by a familiar artifice, arranged his figures so that 2,666 years should elapse between the Creation and the Exodus, *i.e.*, exactly two-thirds of 4,000 years,—“depends entirely upon the datum in *Ex.* xii. 40,

which makes up the number 2,236 to 2,666. But this datum is due to the Later Legislation; whereas the number of years in the Elohist narrative to the Flood (1656) and to the Descent into Egypt (2236) are quite unsymmetrical, and indicate no system whatever."

Passing over the more special arguments for a later date, I may be allowed to refer to the most plausible one of all, drawn from the prosaic simplicity and high religious standing-point of the Elohist, which contrasted with the dramatic fulness of detail, the imperfect morality, and the anthropomorphisms of the Jehovist. It may perhaps be doubted by Kuenen and his friends whether Bishop Colenso has given enough space to the consideration of this argument, which has been developed anew with much force by W. H. Kusters in the January number of the *Theological Journal* of Leyden. The Bishop is of opinion that the difference between the Elohist and the Jehovist in descriptions of the same events can be accounted for more easily on the supposition that they were almost contemporaneous than that they were divided by a long interval. And he remarks that a "priestly writer" would have had no interest in "contradicting" the Jehovist on such a minute point as the cause of the separation between Abram and Lot. It is obvious, however, to reply that though the work of the Jehovist was ancient, it was certainly not "canonical" in the time of the Elohist, and that from the standing-point of the latter it was more pious towards the patriarchs to represent them as separating amicably than as the result of a dispute. Still I do not myself see that the difference in standing-point between the two writers is conclusive as to their dates. It is easy to suppose that the Elohist belonged to a different circle from the Jehovist, and we know too little of the characteristics of the different ages and communities of Israel to deny this.

The justification of the slightheadedness of the Bishop's mode of treatment in this case lies in the fact that such a line of argument as that adopted, for instance, by Dr. Kusters is unfruitful at the present stage of the discussion. Many, if not all of the passages quoted by him, obviously admit of two interpretations. When, for instance, in the Elohist account of the Deluge the months are referred to as the first, second, and so on, instead of by their proper names, it may be, as in Deuteronomy and Jeremiah, and in the books of Kings, because the names had gone out of fashion; but it may also be because the writer considered that the use of them would involve an anachronism, as in the case of Yahweh. The second alternative is left out of sight by Dr. Kusters (*Th. Ti.*, 1873, pp. 34, 35). His next instance is equally doubtful. It is not clear that the genealogy of the Cainites in Gen. iv. is the original of that of the Sethites in Gen. v., because the former has (or appears to Dr. Kusters to have) fewer names. It is a pure assumption of Schrader (in his first stage) and Kusters that v. 29 originally stood after iv. 22 (or 24); it is more obvious to explain it as a Jehovist supplement to v. 28. If so we have exactly ten patriarchs in both genealogies, that is, if we reckon in the three sons of Lamech, two of whose names were evidently formed by the narrator on the model of the third, simply, it seems to me, to make up the round number ten.

But one instance more. Dr. Kusters (*ibid.* p. 38) rejects Bishop Colenso's view that Gen. xvii. is alluded to in xxiv. 7, on the ground that a covenant is not the same as an oath. But: "I swore that the waters of Noah should no more go over the earth" (Isa. liv. 9)—"I establish my covenant with you, neither shall all flesh be cut off any more by the waters of the flood" (Gen. ix. 11). The identity is complete.

Such are the points which seem to at least one reader of this work among the most important of its multifarious con-

tents. It must suffice merely to mention the able though incomplete reply to Prof. de Goeje's attempt to prove the late origin of Gen. x. (see *Th. Ti.*, 1870, pp. 233-268). It is unwise, perhaps, to pronounce decidedly against that acute critic's hypothesis till we have more complete information as to the geographical names current among the neighbours of the Jews in the præ-exile period. I think however that the extension given to the *Grundschrift* by Professor Nöldeke has been satisfactorily disproved by the Bishop in section 125 of the Appendix. His depreciation of the Elohist, or however else we please to call the author of that document, seems to me, in common with the Bishop, to be largely exaggerated, and based unconsciously, no doubt, on a preconceived opinion. It is of course no wonder that both Nöldeke and Kuenen were fascinated by the brilliant suggestion of Gutschmid (so agreeable to analogy) that the Elohist had a symmetrical chronological system, and must therefore have written late, but most readers will, I think, agree with the Bishop (Appendix, p. 133) in consigning it to the limbo of imperfect inductions.

It must also suffice to allude to a few minor points which seem to deserve reconsideration. Page 165, Is Joel as a whole really so ancient? P. 424, This derivation of Pesakh is questionable. P. 582, Do Gen. vii. 16b, viii. 20, refer to the foregoing portion of the Elohist narrative? P. 584, Is the rendering of Gen. i. 3 adopted by Ewald and his able English editor sufficiently natural? (I venture to prefer Graf's grammatical interpretation of the passage.) P. 585, Has the Bishop given the right explanation of the archaisms? (Cf. Geiger *Ürschrift*, p. 235, &c.) P. 609, May not Yahweh have been imported into Phœnicia from Judea as Asshur was imported from Assyria?

Of course the questions re-opened in this volume by Bishop Colenso must not be taken for settled. His main point is in all probability, as I have remarked already, certain of ultimate acceptance; but it is presented to us in connexion with a group of hypotheses, the arguments for which demand the most careful scrutiny. The most remarkable of these hypotheses are (1.) the large share given to the Deuteronomist and Later Legislator in editing and interpolating the first four books of the Pentateuch, and (2.) the separation of the Elohist narratives from the Levitical legislation. It is much to be desired that several independent scholars should investigate the first four books with reference to these positions. As to the first, a distant approximation to the procedure of these ancient editors, who were by no means so mechanical as their modern successors, is all that can fairly be expected. And as to the second a valuable hint is offered by the Bishop himself in section 549, where he points out that the Levitical legislation contains most of the distinctive phrases not only of the Elohist but also of the non-Elohist elements of Genesis, in addition to numerous formulæ, of which there is no trace in the earlier portions of the Pentateuch. The comparison must, however, be extended to the ideas as well as to the phraseology of the disputed portions, and here no doubt is the chief difficulty. Our only chance of overcoming it is the persistent development of an international conception of biblical criticism.

T. K. CHEYNE.

Dr. Pusey's University Sermons. [Sermons preached before the University of Oxford, between A.D. 1859 and 1872. By the Rev. E. B. Pusey, D.D., Regius Professor of Hebrew, and Canon of Christchurch. Second Thousand.] Parker and Rivington. 1872.

THE sermons in this volume are for the most part given without dates, and not in the order of their delivery: an arrangement which one may the more venture to regret on

account of the statement of the preface, that they were preached "mostly at distant intervals," and "suggested mainly by the circumstances of the times or the occasions on which they were preached." The historical interest, so to call it, of the volume is thus considerably impaired. It would of course be possible for anyone who had convenient access to University records to identify and tabulate the dates, but to an ordinary reader the republication of some passages produces the effect of raking the ashes of controversies now either extinct or shifted to different ground.

In truth, this disappointing effect would not be altogether effaced by an index of dates added to the next edition. It is not owing to occasional blemishes, such as it would be easy to lay a finger on: words like "engraced," "enwise," "engodded," "instrengthen," sentences like "let, he who will, let them go" (p. 432), are not English; and where, as at pp. 143-4, this inaccurate language is imported into translation, and the changes rung on "he who" and "him whom," as though they were identical in construction and meaning, the defect is one of matter as well as form. But let anyone read the book through, and he will feel that such criticisms as these are captious; that he is in the presence of a man who has "a genius for godliness,"—whose spiritual power is amply sufficient to do the work of philosophical accuracy or literary grace. It is not possible to be as good a man as the preacher without being something very like a great one: agree or not with his opinions, no reader or hearer can deny that, in things of the spirit, he has made good his right to hold them and recommend them. In one place he has subjected our deference to a very strict test—there is probably not another man in England who could have made the personal confession which we read towards the close of the ninth sermon without offending either the taste or the judgment.

Yet the book is disappointing. The reason is stated in the preface in terms that seem to imply that the author is disappointed himself. "A few of the last" (and best) "in the volume were delivered at a time when the necessity for Roman controversy had subsided; and the writer hoped to be able for the rest of his time to preach to the younger part of his audience on practical subjects. This hope was destroyed by the publication of the *Essays and Reviews*. . . ." And thus the sermons are devoted quite as much to controversy as to edification: and one often feels that the strength of the writer's mind is wasted on an ungenial and uncongenial task—perhaps frittered away on matters of small and temporary interest. Possibly it was unavoidable: if a proposition be denied, those who mean to build on it will be charged with ignorance if they assume it as certain, and so may be forced to re-assert and defend it; and a man in Dr. Pusey's position should be trusted to know when, from his own point of view, controversy thus becomes a necessity or a duty. Else, as a matter even of polemical strategy, one might question whether a different course might not have been more effective; and as a matter of literary interest, there can be no question at all. The *Essays and Reviews* were in a way a representative book: there was a good deal of their spirit in the air, which their publication served to precipitate. But their authors, with one exception, were in no sense leaders of thought; and Dr. Pusey, who to some extent is one, seems to lower himself by attempting detailed replies to them, instead of quietly seeking to counteract the spirit he thinks unhealthy by concentrating and diffusing his own.

Granting that the sermons are to be argumentative, their arguments fall into different classes of different degrees of value. Three were delivered on the annual stated subject of the Jewish Interpretation of Prophecy, for which Dr.

Pusey has been selected by each of the three Vice-Chancellors who have held office within these dozen years. It is, in fact, a subject that seems especially designed for him; for, among the few men that have the special knowledge of Rabbinical literature required for it, there are few orthodox English clergymen, and fewer great preachers. The reasoning of these, and of the three others which are also occupied more or less with the evidential argument from prophecy, scarcely calls for detailed examination: their main purpose is to support the received Messianic interpretation by common-sense Hebrew scholarship and appeal to Old Testament usage, often attested by Rabbinical tradition. As a statement of the case they may be a fair one, but as an argument to carry conviction to the unconvinced they are necessarily inadequate: the conditions of a sermon do not admit of the subtlety, hardly of the accuracy, required for that purpose. It would be unfair to demand that anyone preaching on a text from the Second Epistle of St. Peter should enter on the question of its authenticity; even on Isaiah xlix. 5, we do not complain that we are not told that the words rendered in the A. V., "Though Israel be not gathered," and by Dr. Pusey, "And Israel, which will not be gathered," may very plausibly be taken to mean the exact reverse. It is indeed a little too much when on p. 86 we read, as a translation of Isaiah liii. 10, "His soul shall make an offering for sin," while on p. 92 in the same sermon the rendering of the A. V. is restored and an argument founded on it. But as a rule it is enough to say of such things that a preacher has the privileges, as well as the responsibilities, that come from his audience having no reply.

The objection to *a priori* arguments, such as that of the first in the volume, "Grounds of Faith difficult to analyze because Divine," is deeper. The writer seems to have no common canons of argument with those whom he seeks to convince. We meet with the same confusion, or what looks like confusion, as in Dr. Newman's *Grammar of Assent*: it seems to be assumed that complexity of causes, reaching beyond our powers of analysis, is the same thing with essential unity that admits of no analysis, or with uncaused self-origination. Dr. Pusey may hold that the parental, or at least the conjugal, relation is itself a "mystery," with a supernatural element that makes it a fit illustration for other things supernatural; but the love of country, however nearly, when developed, it may amount to an instinct, clearly admits being traced to known principles of human nature. And what weight has a passage like this? "Analyze eloquence! Analyze the whirlwind or the lightning! Yes! these you may analyze, for they are material; eloquence you can no more analyze than the soul itself, whose voice it is, in the simplicity of its immateriality." Are not men at the mercy of oratory nearly in proportion as their reasoning powers are feeble, or their judgments uneducated? If from the intensity of such influence any inference at all can be drawn, it will be, not that faith is supernatural, but that natural and even vulgar causes can produce effects as completely *sui generis* as faith itself. Dr. Pusey in the preface renews his old protest against the use at Oxford of "ill-chosen textbooks." Certainly an undergraduate who has read Mill's *Logic* could not be convinced by an argument like the above even if he already accepted its conclusion. Not only is it mere rhetoric: it is the rhetoric of a past generation, that now fails as completely to persuade as to convince.

Dr. Pusey's life, even his public life, has already been a long one; but on the alarm of his recent illness many must have felt that they could ill afford to lose him, and that not only on personal and still less on party grounds. Both in its strength and its weakness this volume suggests the hope that he may at length have rest from the wars which

were about him on every side, and be left free for what he is much fitter for, to sing a *Diligam te Domine*.

WILLIAM HENRY SIMCOX.

New Publications.

- BAUDISSIN, W. W. v. Eulogius und Alvar. Ein Abschnitt spanischer Kirchengeschichte aus der Zeit der Maurenherrschaft. Leipzig: Grunow.
- FRANKL, P. F. Studien üb. die Septuaginta u. Peschito zu Jeremia. Breslau: Schletter.
- GRÄTZ, H. Der einheitliche Charakter der Prophetie Joels u. die künstlerische Gliederung ihrer Theile. Breslau: Skutsch.
- LEATHES, S. The Structure of the Old Testament. Hodder and Stoughton.
- PRESSENSE, E. de. Heresy and Christian Devotion. Hodder and Stoughton.
- SYED AHMED. Critical Examination of the Life and Teaching of Mohammed. Williams and Norgate.
- TISCHENDORF, C. v. Haben wir den ächten Schrifttext der Evangelisten u. Apostel? Leipzig: Giesecke u. Devrient.

Physical Science.

Alexander von Humboldt: eine wissenschaftliche Biographie im Verein mit R. Avé-Lallemant, J. V. Carus, A. Dove, H. W. Dove, J. W. Ewald, A. H. R. Grisebach, J. Löwenberg, O. Peschel, G. H. Wiedemann, W. Wundt; bearbeitet und herausgegeben von Karl Bruhns, Professor und Director der Sternwarte in Leipzig. In drei Bänden. Leipzig: F. A. Brockhaus. 1872.

As the fourteenth of September, 1869, the hundredth anniversary of the birth of Alexander von Humboldt, drew near, it was remarked that there did not exist any comprehensive description of the life and labours of the philosopher whose name was about to be celebrated in all quarters of the globe. This arose mainly from the fact that no single biographer was in a position to grasp the many sides of Humboldt's nature. Then it occurred to Professor Bruhns to invite a number of learned men to join him in composing a biography which should depict Humboldt from every view-point of his activity. The general scheme of the work embraced two greater divisions—first, Humboldt's outer life; second, his doings in the various domains of science. In its preparation the editor was enabled to make use of a much more extensive and rich original material than ever was anticipated. The Berlin Observatory lent Humboldt's manuscripts; the Ministerin von Bülow, a niece of Humboldt, permitted the use of the diaries of his travels; many hundreds of letters to personages in high station, to learned men at home and abroad, to friends and relations, have been collected and examined; some larger collections—specially that of Herr Seifert, Humboldt's faithful chamberlain—were bought, so that the descriptions contained in these volumes lay claim to completeness and truth. The first volume, which tells the story of Humboldt's youth and middle age, as well as of his journeys in America and Asia, is written by Julius Löwenberg, who was possessor of many original documents relating to these periods. In the second volume Dr. Robert Avé-Lallemant, who has himself personally moved in the scientific circles of the French capital, depicts the period of Humboldt's years of study and labour in Paris; and Dr. Alfred Dove, aided by a rich store of existing material, and with great experience of Berlin life, has described Humboldt's later years most fully. A bibliographic list of works, treatises, and scattered papers by Humboldt, compiled by Julius Löwenberg, and numbering upwards of six hundred, concludes the second volume.

The third treats of Humboldt's researches in the various branches of science, and is composed of eight essays by masters in each of the scientific domains into which Hum-

boldt's genius led him to explore. Professor Bruhns takes up Humboldt's mathematics, astronomy, and mathematical geography; Hofrath Gustav Wiedemann his separate physical and chemical experiments; Professor H. W. Dove the meteorology; Professor Julius Ewald the geology; Professor Oskar Peschel the *Erdkunde*, ethnology, and political economy; Hofrath August Grisebach the botany; Professor Victor Carus the zoology and comparative anatomy; and Professor Wilhelm Wundt the physiology, of Humboldt's works, notably of his travels and of the *Kosmos*.

Three portraits of Humboldt, at the ages of twenty-seven, forty-five, and eighty-one years respectively, accompany the work; the first is from a painting in the possession of the Ministerin von Bülow, which was taken in 1796, and has never hitherto been copied; the second has a special interest, since its original was drawn by Humboldt himself from a mirror in Paris in 1814; the original of the third is one of the few portraits painted by Edward Hildebrandt, who was an intimate friend of Humboldt in his later years.

It is impossible in the limits of this notice to deal specially with each portion of this many-authored work, and it may be of greater interest and utility to trace from its pages the rough outline of Humboldt's life and working, somewhat in chronological order.

Alexander von Humboldt sprang from an ancient noble family of the house of Zemmenz, in further Pomerania. His father, Major von Humboldt, married, in 1766, the widow of Captain Ernst von Hollwede, a daughter of the Director of the East Frisian Chamber, Johann Heinrich von Colomb.* From this marriage were born a daughter, who died early, and the two sons, Friedrich Wilhelm Christian Carl Ferdinand, born in Potsdam on the 22nd of June, 1767, and Friedrich Wilhelm Heinrich Alexander, born at 22, Jäger Strasse, in Berlin, on the 14th September, 1769.

"In the year of Alexander's birth Napoleon, Cuvier, Châteaubriand, Canning, Wellington, and Walter Scott were born. The hour of his birth was the culminating one of the victorious career of Prussia's greatest monarch. Lessing already illuminated the horizon of German spiritual life, Kant ruled the laws of thought, and in Goethe, only twenty years of age, the storm and power of the period of our German classical literature already sounded. Such were the brilliant stars of his horoscope." The Prince of Prussia, afterwards King Friedrich Wilhelm II., was sponsor at his baptism.

The early years of the brothers Humboldt were spent together, the summers in the little château of Tegel on the Havel, their paternal residence, the winters in Berlin. Kunth, the son of a Protestant clergyman in Baruth, became tutor to the brothers in 1777, and of all their earlier instructors appears to have exercised the strongest influence in developing their powers and in guiding their bent. Alexander began early to show a preference for the objects of natural history; plants and flowers, sparrows and beetles, mussels and stones were his favourite playthings, and he arranged and classified his collections with such zeal as to earn for himself the by-name of the "Young Apothecary."

The desire of his parents being that he should devote himself to finance, he entered the University of Frankfurt on the Oder in 1787 as a student of political economy; but this branch of education was of such a low standing at Frankfurt, that "er studirt cameraia" had become a name for one who learned nothing. Returning to Berlin in the following year, a friendship sprang up between Humboldt

* Thus by a remarkable freak of destiny, the mother of "the scientific discoverer of America" bore the same name as its geographical discoverer of the 15th century.

and the botanist Willdenow; from this date Humboldt's botanical studies commenced, and the first-fruit of his published work was a botanical paper, "Sur le Bohon-Upas," in the *Gazette littér. de Berlin* of the 5th and 12th January, 1789. In this year Humboldt went to Göttingen, whither his brother had preceded him. The University was at that time in the flower of its scientific repute, and its faculties boasted men whose learning was famed throughout Germany.

In the house of Professor Heyne, Humboldt became the intimate friend of George Forster, who sympathized thoroughly with his aspirations, and had great influence in moulding his plan of life. Forster had already accompanied Cook in his second voyage round the world, and was a master of almost every branch of natural history, physics, and chemistry. With Forster, Humboldt made his first tour abroad to Holland, Belgium, England, and France. Following out his studies of finance and political economy, Humboldt attended the Academy of Trade in Hamburg during 1790-91. His next movement was to the School of Mines at Freiberg, in Saxony, where, among others whose names were afterwards to become famous, he met Leopold von Buch as a fellow student. "In Freiberg, Humboldt concluded his years of academic study. It was, however, neither mineralogy nor mining, botany, physics, or chemistry that had exclusively occupied his attention; it was rather the general conditions of organic life that he sought to decipher even in the deepest and darkest corners of the mines." In 1792, in his twenty-second year, Humboldt took public service as *Berg Assessor*, and favoured by his social position and great acquirements found the gates which led to honours from the State thrown wide open to him. Appointed soon after to the office of *Oberbergmeister*, he was sent, at his own suggestion, to examine and report on the mines in Upper Bavaria, Salzburg, Galicia, and Upper Silesia in a series of tours. In 1794 he was politically engaged in the suite of the Minister von Hardenberg, in the negotiations which terminated the war with France in the peace of Basle, in September of that year. In May, 1795, Humboldt decided to leave the Government service, and to devote himself to scientific exploration; and this resolve he followed up by a tour throughout the Alps, to examine the bearing and connection of the different parts of the chain, and collect material for a work "On the Formation of the Earth in Central Europe," which however did not appear in this form.

During the war of 1796 we find Humboldt again employed as a diplomat in preserving the neutrality of the provinces of Franconia and Hohenlohe; later in the same year, however, he had returned to more congenial labours, and was engaged in meteorological investigations at Berlin. The death of Humboldt's mother at the end of this year, after a lingering illness, formed a turning-point in his career; it freed him from the bonds which had tied him to home, and gave him the fullest means of carrying out the long treasured plans of travel, of gratifying his ardent desire to visit the tropics. In November, 1797, a wealthy Englishman made a proposal to Humboldt that he should accompany him to Upper Egypt. "This was Lord Bristol, Bishop of Derby, decidedly a free spirit in spite of his high function in the Church, and with an income of £60,000 a year, one of the most fashionable men of the world, an enthusiastic patron of the fine arts." But shortly after Humboldt's arrival in Paris on his way to join him, the news arrived that Lord Bristol had been arrested in Milan on suspicion of being about to agitate in Egypt for England against France. Thus the projected journey to Egypt had to be abandoned; but a more extensive plan took the place of this one. Writing to Willdenow at this time, Humboldt

says:—"I was received in Paris in a manner such as I never could have anticipated. . . . Old Bougainville has projected a new voyage round the world, to be directed specially towards the South Pole. He asks me to follow him, and since I am just at present engaged in magnetic investigations, a voyage to the South Pole has greater attractions for me than even a journey to Egypt. I was full of hope and expectation, when suddenly the directors arrived at the heroic resolve not to send Bougainville, who is seventy years old, but to allow Captain Baudin to make a voyage round the world. Scarcely had I heard this decision when I received an invitation from the Government to accompany the 'Vulcan,' one of the corvettes of the expedition. All the national collections are thrown open to me that I may choose from them whatever instruments I may wish. I am to be consulted in the choice of naturalists, and in every part of the preparations. . . . The first year is to be passed in Paraguay and Patagonia; the second in Peru, Chile, Mexico, and California; the third in the South Seas; the fourth in Madagascar; and the fifth in Guinea." Later he writes: "What an inexpressible grief is it to me that in fourteen days each and all of these hopes have been shattered. The causes assigned for relinquishing the project are the cost, and the fear of an approaching outbreak of war."

Humboldt now conceived the plan of following Buonaparte's Egyptian army by the land route from Tripoli, through the desert to Kairo, and with this intent left Paris for Marseilles in company with the young botanist Bonpland. Here a fresh delay occurred in procuring a sea passage. Meanwhile came the news that the Dey of Algiers had prevented the caravans from starting for Mecca, that they might not pass through Egypt defiled by the presence of Christians. Turning now to Spain, Humboldt and his companion travelled through the peninsula, engaged in collecting botanical specimens, in determining the positions of places, measuring elevations, and making meteorological, geological, and magnetic observations. In Madrid, Humboldt experienced the fulfilment of his long cherished wish, by obtaining from the King permission to travel in the Spanish colonies of South America.

Now follows Humboldt's great journey of five years in America—from the 5th of June, 1799, when the "Pizarro" weighed anchor in the harbour of Coruña, till his return to Bordeaux in August, 1804. At the end of last century the American colonies of Spain stretched without a break from the north-west point of California to beyond the most southerly part of Chile, embracing the whole of the present Southern States of the Union, and all the South American continent except the Brazils, Patagonia, and Tierra del Fuego. Up to this time this vast territory had not been explored by any scientific traveller, and Humboldt's journey lay through an almost unknown region. Whilst former travellers had gone to satisfy simple curiosity, and had set down every experience as of equal moment, taking care to relate their own personal adventures with epic fulness, Humboldt, carefully avoiding personal details, made nature in the manifold relations and connections of her phenomena the object of his study, referring every object to its place in the one great system. As far back as 1796 he had written, "Je concue l'idée d'une physique du monde:" the comparison of observed facts was to him of greater value than the search after scattered novelties. But such a journey could not but yield immense additions to every branch of knowledge. Among his many remarkable discoveries was that of the hydrographical union of the basins of the Amazons and Rio Negro in the natural canal of the Casiquiare; his ascent of the giant Chimborazo, then believed to be the highest mountain of the world, to an elevation of 18,069 Paris feet, an

elevation above the earth's surface never previously reached by man; the exploration of the volcanic plateau of Jorullo in Mexico which had suddenly arisen in one night of 1759; and the measurement of the height of the colossal M^t Popocatepetl, the summit of North America, are among the well remembered points of interest in his journey.

On setting out for America, Humboldt had left France a Republic; he returned to find an usurper on its throne, and its people, still delirious in the glory of victories, were celebrating the "Napoleon's Day" as he entered Paris in August, 1804. But science had been progressing with rapid strides, and Paris had undoubtedly become the world's school of the exact and especially of the natural sciences. Humboldt renewed old friendships, and many men now sought his acquaintance, among whom were the famous chemist Gay-Lussac, and Franz Arago, the astronomer. Wherever he appeared in private assemblies or in meetings of learned bodies Humboldt was a hero. One man only there was who met him with rudeness and lasting dislike—Napoleon—whose almost contemptuous words on receiving Humboldt are recorded, "You busy yourself with botany; my wife occupies herself with that." The arrangement of the treasures of his collections and the preparation of an account of his journey now busily occupied him. In March, 1805, however, he visited his brother Wilhelm in Rome, and nature appears to have favoured his visit to Italy, for just then an outbreak of Vesuvius occurred, and was witnessed by Humboldt, Gay-Lussac, and Leopold von Buch together. Having returned to Berlin in November, 1805, Humboldt was nominated chamberlain to the king, and received a royal pension of 10,000 francs. At this time, besides actively progressing with the work of his travels, Humboldt's papers read before the Berlin Academy were very numerous: "On the Laws of the Reduction of Temperature in the Higher Regions of the Atmosphere," "On Steppes and Deserts," "On the Aborigines of America," "On the Species of Chincona," were among their varied subjects.

In the spring of 1808 the Prussian Government, in the hope of reducing the burdens imposed by the treaty of Tilsit, by means of negotiations with Napoleon, resolved to send the younger brother of the king, Prince William of Prussia, to Paris, and Humboldt, to his astonishment, was ordered to accompany the Prince in his difficult diplomatic mission. The residence of the Prince lasted till autumn of 1809, and Humboldt, finding it inconvenient to carry on the preparation of his work in Germany, received permission from the king to remain in France as one of the foreign members of the Paris Academy. Henceforward for a series of years Humboldt remained in this city, actively engaged in the publication of the many fruits of his great journey, the "*interminable voyage*," and in closest intercourse with a circle of men whose names will in all time be remembered. Long before this great work was completed Humboldt's mind was occupied with plans for the execution of what seemed to him the second mission of his life—to explore scientifically the continent of the Old World also. In this view he studied the Persian language, with the orientalist Silvestre de Sacy and André de Nerciat, as being the easiest among Asiatic tongues, and in 1810 he had decided to accompany a Russian expedition then preparing to visit Upper India, the Himalaya, and Tibet. But the Russian plans were suddenly overturned, and the expedition, for which Humboldt had made every preparation, was not carried out. In 1812 a new expedition was planned in Russia to pass from Siberia by Kashgar and Yarkand to the Thibetan highland; but Napoleon's campaign intervened, and this hopeful opportunity was also lost. Then came the year 1813 with its ever memorable events. When the Cossacks were in Paris,

Humboldt made use of his international position to save the collections of the *Fardin des Plantes* from spoliation, and without his intervention these would certainly have been destroyed. On the thirty-first of March, 1814, Friedrich Wilhelm III., King of Prussia, entered Paris at the head of his troops, and Humboldt was immediately summoned to personal attendance on the monarch. From this time till 1823 Humboldt was almost constantly with the Prussian king, during his visit to London, at the Congress of Aix la Chapelle in 1818, at the Congress of Verona in 1822, and afterwards at Rome and Naples. Three years of undisturbed labour in Paris then followed, and in 1826, at the renewed desire of King William, Humboldt again took up his abode in Berlin.

In 1827 the then Russian Minister of Finance had occasion to request Humboldt's opinion regarding the utilization of platinum, of which a great store had just been discovered in the Ural mountains, as a metal for coinage, and Count Cancrin remarked in his letter that "the Ural would be well worth a visit from a naturalist." This suggestion so fully met Humboldt's long-cherished views as to lead to a correspondence on the subject of Asiatic exploration, and this terminated in a request from the Emperor Nicholas that Humboldt should make a scientific tour in Eastern Russia, the necessary funds being placed at his disposal. At his request Professors Ehrenberg and Rose were permitted to accompany him. On the twentieth of May, 1829, after a splendid reception at Petersburg, the expedition set out. The journey extended beyond the Ural, and across the Kirghiz steppes to the mines of the Altai and the borders of Chinese Zungaria. On the return route the Caspian Sea was visited, in order to ascertain the chemical composition of its waters and its level below that of the sea, and to form a collection of its fishes to enrich the great work of Cuvier and Valenciennes. The fame of Humboldt had spread beyond the Ural, and everywhere he was received with almost regal honours.

In December, 1829, Humboldt, then in his sixty-first year, was again in Berlin; the full desire of his earliest youth to journey in distant lands had been satisfied, and the years of his travelling life were past. Then began the calm years of untiring labour in his home study in Berlin, during which he collected the sum and results of all his travels, studies, and observations in the *Kosmos*, the work of his life, "a monument of the restless advance of modern science." From 1830 till 1848, indeed, he was sent on various diplomatic missions to Paris; but these visits were not of long duration. The later years of his life were spent in Berlin, where his renown attracted men of science and travel from all parts of the world. Humboldt died on the 6th of May, 1859. The *Kosmos* remained incomplete; "slowly as it had dawned, at last, in the late evening of this much experienced life, the night had broken in—the 'night when no man can work.'"

We have seen that the childhood and early youth of Humboldt were surrounded by every possible advantage which could be given by social position and aristocratic birth. His talents had not to strive upwards through opposing poverty and obscurity. But the strength of his character is shown in resisting the attractions and temptations to a life of luxury and ease, such as his interests commanded, and in devoting himself from earliest youth with increasing eagerness and most untiring industry to the cause of knowledge, even in spite of bodily weakness. At the universities, and up to the close of his academical career, the warmth and openness of his character everywhere won for him the true and lasting friendship of his fellows. The only fault of his earlier life is that of "conceit and desire of reputation," recorded in a letter written by his brother William. Eckermann relates how, meeting with Goethe, the

poet said to him, "Alexander von Humboldt has been with me for some hours this morning. What a man he is! I have known him so long, and yet I am ever newly astonished at him. One may truly say that in learning he has not his equal, and such many-sidedness I have never seen before. On whatever subject one may touch he is at home, and overflows with mental treasures." Of Humboldt in his twenty-seventh year Schiller wrote the somewhat harsh opinion, afterwards fully withdrawn: "About Alexander I can give no definite opinion; but I fear, in spite of all his talents and restless activity, that he will never reach any very high position in science; a narrow, inquiet conceitedness seems to pervade everything that he does."

It is very remarkable that Humboldt, whose leading idea throughout life was that of the harmony of all created things, should have been perfectly averse to music of any description: to Wilhelm von Humboldt music was unbearable; Alexander held it to be a "calamité sociale."

In Paris, after his return from South America, Humboldt's comprehensive and varied occupations were only possible with the most rigid allotment and utilization of time; and throughout his later life the same daily rule and punctuality were maintained. He rose early, at eight o'clock went into Paris to an "impenetrable inner chamber of my friend Arago in the basement of the Institute," to write or study there; at twelve he breakfasted; then continued his labours till seven o'clock, dined, visited the salons of his friends till midnight, always a centre of attraction and entertaining and lively conversation; and afterwards again wrote or studied till two o'clock in the morning. Most frequently he chose out of the way houses, in order to be as little disturbed as possible. Towards young aspirants in science Humboldt was especially gracious, and very many stories of his practical goodwill are related.

A vivid picture of Humboldt in his later life in Berlin is given by Bayard Taylor, an American traveller, who visited him in November, 1856. Of Humboldt's personal appearance, which is scarcely touched upon in other parts of the biography, he says:—"The first impression which Humboldt's features makes is that of a great and warm humanity. His massive brow, laden with the accumulated knowledge of almost a century, inclines forward and shades his breast like a ripe ear of corn; yet when one looks beneath it one meets a pair of clear blue eyes, of the innocence and mirth of a child's; out of these eyes speak the truth-loving nature of the man, the undying youth of the heart. . . . The first look begets confidence, and one feels that he will confide in us if we are worthy of his trust. I had approached with a naturally distant feeling of reverence, but in five minutes I felt that I loved him, and that I could speak as freely as with a friend of my own age. . . He thought as he spoke—without trouble. I might compare his nature to the fountain of Vaucluse, or to a calm lake outflowing in a deep river."

In several of the essays of the concluding volume, which treat of the branches of science that Humboldt's labours tended to illustrate and extend, a half apology is made at their outset that Humboldt's knowledge of a special subject was not such as would compare with that of one or other of his contemporaries whose life had been devoted to one particular science. This is very readily understood, for the "system of the world" which Humboldt conceived embraced in its grasp every branch of learning and every science—a scheme far beyond the powers of any human mind to work out; but at the same time it may be affirmed with confidence that no man has surpassed Humboldt in the reach and variety of acquirements which he brought to bear on his vast study of the harmony of the universe.

KEITH JOHNSTON.

Notes on Scientific Work.

Geology.

Footprints in Carboniferous Rocks.—Principal Dawson has described (*Amer. Jour. of Science*, January, 1873, 16) some footprints which occur in great abundance in dark coloured flagstones of the millstone grit at McKay's Head, Nova Scotia. These he refers to the genera *Protichnites*, Owen, *Rusichnites*, *Diplichnites*, and *Rabdichnites*, Dawson, and *Arenicolites*, Salter. Of *Protichnites* two species are described, *P. Carbonarius* and *Acadicus*. The former appear to have been produced by a small animal allied to the *Limulus*. Like its ancestors in the Silurian, it has left no trace of the edges of the carapace, but some very distinct impressions of a sharp pointed tail, and of several pairs of sharp pointed walking feet, the posterior feet having three or four toes. On the same slabs occur series of impressions with no tail-marks, and tail-marks with but traces of those of the toes. The imprints *P. Acadicus* from the Lower Carboniferous at Horton Bluff were apparently produced by a pair of flat organs, crenated at the edges. No remains of the animals themselves have yet been found. Many of the cylindrical markings which have been described as plants under the names *Palæochorda*, *Buthotrephis*, *Palæophycus*, *Anthrophycus*, &c., are believed by the author to be worm-burrows, and referred to *Arenisolithes*, specimens from the Primordial and Carboniferous rocks having suggested to him an explanation of their branching or radiate characters. They present a central burrow from which the creature probably extended and withdrew its body in several directions. To *Diplichnites* and *Rabdichnites* are attributed markings probably produced by the pectoral or ventral fins of fishes armed with spines. To the latter he refers the *Eophyton*, Torell, from the Primordial, and considers that, as fish remains are unknown in these beds, they may have been caused by the feet or spinous tails of swimming crustaceans.

The Oolites of Northamptonshire.—In a paper communicated to the Geological Society on February 5th, Mr. Sharp shows that the "Lincolnshire Limestone" of Mr. Judd, which occurs between Kettering and Stamford, and traverses Rutland and Lincolnshire to Yorkshire, and which, being sometimes oolitic in structure, has hitherto been confounded with the Great Oolite Limestone, is really distinct from it, and belongs to the Inferior Oolite. Between Northampton and Kettering the Great Oolite Limestone in the surface rock and sections between these points exhibit the following order of beds:—

Great Oolite	Limestone	
" Inferior Oolite	Upper Estuarine Clays	
" "	Lower Estuarine Beds	Northampton Sands
" "	Ferruginous Beds	
Upper Lias	Clay	

On the eastern escarpment of the Ise valley, one mile east of Kettering, the Lincolnshire Limestone makes its appearance as a thin bed in the following section:—

Great Oolite	Limestone	
" Inferior Oolite	Upper Estuarine Clays	
" "	Lincolnshire Limestone	
" "	Lower Estuarine Beds	Northampton Sands
" "	Ferruginous Beds	
Upper Lias	Clay	

This is repeated on the western escarpment and in numerous other instances, with the occasional addition of the Great Oolite Clay, in other escarpments in Northampton and the above-mentioned counties. At Weldon the limestone has a thickness of about 30 feet, but thins out very rapidly to the eastward, and is not met with in the Nene escarpment at Oundle. Palæontological, as well as stratigraphical evidence goes to prove that the "Lincolnshire Limestone" belongs to the series of the Inferior Oolites.

A New Sub-Class of Fossil Birds.—Prof. Marsh points out (*Amer. Jour. of Science*, February, 1873, 161) some further remarkable characteristics in the fossil birds with biconcave vertebrae from the Kansas Cretaceous Shale. The *Ichthyornis dispar*, Marsh, possesses numerous small, well-developed teeth, implanted in sockets in both jaws, and inclined more or less backwards. There are twenty in each ramus, the maxillary appearing to have contained about the same number. The skull is of moderate size, and the lower jaws long and slender, and apparently not encased in a horny sheath. The bones of the wings and legs are of ornithic type, the bones of the posterior extremities resembling those of swimming birds. Mr. Marsh proposes to establish a new sub-class *Odontornithes*, or *Aves Dentate*, for the reception of these animals, the order receiving the name *Ichthyornidae*. He suggests that the *Archæopteryx* likewise had teeth and biconcave vertebrae; the elongated tail of that bird however serves to distinguish it from the *Ichthyornidae*.

Mammals of the order Dinocerata.—The Museum of Yale College possesses specimens of the remains of many individuals of animals of the order *Dinocerata* from the Eocene beds of Wyoming, and amongst them a very complete skull of the species *Dinoceras mirabilis*, Marsh. The remarkable cranial characters exhibited by this specimen, and the erroneous views which have been promulgated relative to the osseous

structure of this group of large mammals have induced Prof. Marsh to print a short description of their prominent peculiarities, preliminary to a fuller one which is in preparation. The skull is long and narrow, supporting three separate pairs of horns rising successively above each other, those of the posterior being supported on an enormous crest constituted by the great development of the supraoccipital, with the parietal and frontal bones. This crest descends rapidly in front of these horns, and concludes nearly over the centre of the orbit. The maxillaries, which are very massive, support the second pair. These cores are conical, their summits being obtuse and round, those of the posterior being transversely flattened towards the top as if the horns had been expanded and perhaps branched. Below are the huge canine teeth, resembling those of the walrus, the extremity of the fang being implanted in the base of the horn core. Moreover the maxillaries contain six small premolar and molar teeth, and near the end of the nasal bones there is a pair of low tubercles which support "dermal horns." The horn cores are all solid and smooth, giving no indications of a burr. Several parts of the skeleton resemble in a remarkable degree that of the Proboscidea, but exhibit the following distinctive characters: 1. The absence of upper incisors. 2. The presence of canines. 3. The presence of horns. 4. The absence of large air cavities in the skull. 5. The malar bone forms the anterior portion of the zygomatic arch. 6. The presence of large postglenoid processes. 7. A large perforated lachrymal, forming the anterior portion of the orbit. 8. A small and horizontal narial orifice. 9. Greatly elongated nasal bones. 10. The premaxillaries do not meet the frontals. 11. The lateral and posterior cranial crests. 12. The very small molar teeth, and their vertical replacement. 13. The small lower-jaw. 14. The articulation of the astragalus with both the navicular and cuboid bones. 15. The absence of a true proboscis. These extraordinary animals were equal in size to the elephant. (*Amer. Jour. of Science*, February, 1873 117.)

M. Munier-Chalmas announces (*Revue Scientifique*, 15th February), that he has discovered in the eocene travertine of Sézanne a species of *Vitis* similar to certain varieties of the cultivated vine, but more nearly resembling two exotic species, the Asiatic *Vitis persica* and the American *Vitis riparia*. It will be described in a work, now in preparation by M. Comu and himself, on the flora and fauna of Sézanne.

In the current number of the *Zeitschrift der deutschen geologischen Gesellschaft* (Band xxiv., heft 3) Prof. Gustav Rose corrects an important error which occurs in *Kosmos*. In Band iv., page 468, appears his classification of the trachytes, founded on the enclosed crystals observed in each variety, and drawn up in 1852 for Humboldt's use. He arranged these rocks in four classes, to which a fifth and sixth, including the dolerites and leucitic porphyry, were added by the author of *Kosmos*. These are to be struck out. At a meeting of the Society, the proceedings of which appear in the same part of the *Zeitschrift*, Prof. Virchow exhibited a human skull of the more rare brachycephalic form, found at Dömitz in a bed of brown coal and fish remains, at a depth of 28 feet, or 20 feet below low-water of the Elbe. He considers it the oldest prehistoric skull which has been found in North Germany.

At the anniversary meeting of the Geological Society the Wollaston Gold Medal was awarded to Sir Philip Egerton, and, on the first occasion of its being conferred, the Murchison bronze medal to Mr. W. Davies, of the Geological Department, British Museum.

Physiology.

Structure of the Nerve-Elements in Gasteropoda.—Mr. Solbrig has just published an elaborate essay on the histology of the nervous system of the Gasteropoda, and gives the following as the conclusions at which he has arrived:—1. The ganglion-cells very rarely possess a proper membrane; that of the nucleus, on the other hand, is easily demonstrable. 2. The cell substance consists of an albuminous material, through which granules of various size are distributed, sometimes apparently irregularly, sometimes with a certain amount of regularity, so that after the application of certain re-agents, they present a tendency to concentric striation. 3. There are no apolar ganglion-cells in Gasteropoda. 4. Most of the cells possess a single process, or are unipolar; bipolar and multipolar cells are comparatively rare, the proportion of the latter to the former being as one to eight. Of the unipolar cells those predominate the diameters of which do not exceed one ten-thousandth of a millimeter. 5. The cell processes either run directly into a nerve fibre or undergo previous division. In the latter case they either give off several branches which do not further divide, or the division is continued again and again till they become immeasurably fine. Fibres are occasionally met with, which after a short course break up into a brush of fibres. From each of the above kinds of fibres delicate fibrils may be given off. 6. In no instance was the anastomosis, or junction of two adjoining cells by a direct branch, observed by the author. 7. The cell substance, in passing into a fibre, becomes gradually attenuated, or, in other words, the fibres arise from the cells by a conical process. In some of the bipolar cells fine striæ run to the nucleus and nucleoli. 8. The nerve fibres of gasteropods have no sheath of schwann. 9. No

differentiation of the fibre into nerve medulla and axis cylinder can be detected. 10. The nerve fibres are as a whole comparable to the axis cylinder of the nerve fibres of vertebrata having the appearance of a homogeneous band in which no fibrillation is in the fresh state visible. 11. The passage of the processes of the cells into nerve fibres takes place either directly, in which case the fibres arise both from the cell substance and the nucleus of the cell, or indirectly, and in this instance true primitive fibres spring from an intermediate granulo-fibrous tissue, in which the cell processes undergo extremely minute subdivision.

The Mode of Termination of Sensory Nerves.—In a paper contained in the *Rendiconti del R. Istituto Lombardo* (Vol. v.) M. E. Sertoli states that he has examined the tactile hairs of the dog and horse by the chloride of gold method, and found that in longitudinal sections of the tactile hairs very numerous dark violet-coloured nucleated bodies of irregular stellate or conical form occur between the columnar cells, which form the outer layer of the external root-sheath. These bodies give off fibrous and frequently varicose processes, which anastomose with each other, so as to form a kind of plexus, in each of the meshes of which from two to four of the columnar cells of the external root-sheath are enclosed. M. Sertoli compares these cells with those found by Langerhans in the stratum malpighii of the skin of man, though they differ from them not inconsiderably in number, position, form, and size. In the upper half of the hair follicle, however, smaller stellate corpuscles occur, which closely correspond with those described by Langerhans and Eberth. Sertoli has succeeded in tracing nerves directly into the larger bodies, situated in the external root-sheath; as yet he has only observed them in the tactile hairs of the horse. Sertoli has never been able to discover nerves in the papilla of the hair.

Peptic Action of the Pyloric Glands.—Considerable difference of opinion exists among physiologists in regard to the activity of the secretion formed by the glands of the pyloric region of the stomach. Fick and Friedinger on the one side consider that this secretion has no digestive properties, whilst Ebstein and Grützner maintain that it possesses in a very high degree the power of converting albumen into peptones. V. Wittich has just published, in the last part of Pflüger's *Archiv*, (1873, 1) the results of his investigations, which coincide with those of Fick. V. Wittich does not think the weight of albumen dissolved can be taken as a measure of the amount of pepsin in the fluid, since a disproportionately small quantity of pepsin will dissolve a large amount of albumen. He is rather disposed to seek in a comparison of the rapidity of action, a means of estimating the amount of pepsin present, the temperature and other conditions being the same in all cases. His experiments performed on pigs and rabbits have satisfied him that in these animals at least the pyloric glands furnish no pepsin.

Amount of Nitrogen in Muscle.—S. L. Schenk in his anatomico-physiological observations—has made some experiments on the proportion of nitrogen contained in flesh, a subject of considerable importance in experiments bearing upon the general nutrition of the body. He finds that the amount varies with the quantity of water, or the succulency of the tissue, the amount of fat which it contains, and the quantity of connective tissue that is mingled with the muscle. The first two factors can be readily removed by drying and maceration with ether, but the third is not easy to estimate or remove. When present in considerable quantity it largely increases the amount of nitrogen apparently contained in the flesh, for from experiments made on connective tissue taken from the fasciæ of muscles, from the periosteum of long bones, from the pericardium, and the external coat of the arteries, and from the mesentery, he finds that the amount of nitrogen is no less than 5 per cent, and in muscle rich in connective tissue 3.76 and 3.92 per cent. These numbers considerably exceed Voit's average of 3.4 per cent., and would lead to erroneous conclusions in regard to its value as an article of diet.

The Effect of Suppressing the Excretion of the Skin.—It is well known that if a rabbit or other small animal be shaved, and the skin be painted over with some material impervious to gases or vapours, death will soon ensue. The subject has recently been investigated by M. N. Socoloff, at Prof. Botkin's Laboratory, in St. Petersburg, and he gives the following of the results he has obtained in a provisional communication to the *Centralblatt für die medicinische Wissenschaften* (1872, No. 44):—1. A few hours before death the animals experimented on exhibited clonic or intermittent, and tetanic or persistent cramps and convulsions in various groups of muscles, whilst the temperature in the rectum fell to a considerable extent. 2. Even wrapping the animal in cotton wool failed to produce any material increase in the temperature of the intestine, or delay death. 3. Inhalation of oxygen was equally powerless in preserving life. 4. Ulcers arising from deep-seated extravasations were found in the stomach. 5. Albumen made its appearance in the urine shortly after the animal had been varnished. 6. Some of the animals were covered with inert substances, like gelatine and gum, while others were painted with a varnish of asphalt in oil of turpentine; in all cases diffuse parenchymatous inflammation of the kidneys was observed, sometimes accompanied by enlargement of the cell elements, and sometimes by fatty degeneration of them.

Botany.

The Fertilization of Grasses.—Hildebrand has published an important paper on an exceedingly careful series of observations on this subject in the *Monatsbericht der Akad. der Wissenschaften zu Berlin* for September and October, 1872. The agent of fertilization in all grasses, except those few the flowers of which never open, is the wind; insects appear to play no part in it. With this object the pollen grains are very fine-grained and smooth, so that they are at once dispersed by a breath of air; the filaments are usually not stiff, but versatile, and the stigma is either feathery or otherwise presents a large surface with numerous indentations, in which the pollen is easily lodged. These contrivances render cross-fertilization inevitable; and while self-fertilization is in most cases not absolutely prevented, it is generally rendered very difficult. Previous observers had considered that self-fertilization must take place, because they had, in a large number of cases, never observed the flower open; this arose, however, from a want of close observation, the fact being that the flower does almost invariably open, but often remains so only for a very short time, and frequently only at a particular period of the day, which varies in different species. The weather also appears to exercise a very marked influence on the mode of fertilization in grasses; many species which are ordinarily self-fertilized never opening their flowers when the weather is cold and rainy, and being in such circumstances necessarily self-fertilized. Hildebrand then takes up in detail the various modifications of the sexual organs found in grasses. Dioecious grasses are very rare, the only certainly known kinds being two species of *Spinifex*, described by Engelm. in America. Monoecious grasses are more common, the relative positions of the male and female flowers presenting interesting differences; there are also a number of polygamous species. Of grasses with hermaphrodite flowers, a few are protogynous and hence necessarily cross-fertilized; and among these is the sweet vernal grass *Anthoxanthum odoratum*. In by far the larger number of grasses, however, the male and female organs are developed at the same time, and special contrivances are displayed for ensuring cross-fertilization. In the rye *Sacale cereale*, the position of the organs is such that a part of the pollen from one flower must almost necessarily fall on the stigma of another flower. In the wheat each separate flower remains open only for an extremely short time, the glumes separate from one another suddenly, the anthers immediately protruding, and at once opening and discharging the whole of their pollen, only about one-third of their pollen falling on the stigma of its own flower, the remainder being dispersed through the air, and the whole of this process not occupying more than half a minute. In most of these cases the stigma remains receptive only for a very short period, and then dies, while in others the stigma remains in a receptive condition till long after the anthers have dropped off, and then must necessarily be open to the access of foreign pollen. In comparatively few cases the natural contrivances appear to favour self- rather than cross-fertilization; this is the case in *Avena sativa* and *Hordeum vulgare*; in both these cases the majority of the flowers never open, and are therefore necessarily self-fertilized; there appear, however, in almost all cases to be a small number of flowers, often arranged in one or two separate rows, which do open, and therefore may introduce occasional cross-fertilization. It is probable that the same species behaves differently in relation to its arrangements for fertilization under different circumstances of climate, while species very nearly related to one another exhibit phenomena which offer a marked contrast.

Flora of Europe during the Upper Eocene.—The Count de Saporta has given in the *Annales des Sciences Naturelles* for September, 1872, a critical view of the state of our knowledge of this period of fossil botany with more especial reference to the materials derived from the gypseous beds of Aix in Provence. He expresses with perfect justice a strong opinion as to the unsoundness of the methods pursued by many industrious workers in this subject. Their determinations seem to have been checked by no feeling of responsibility, and to have been guided merely by individual caprice. Fragmentary remains have been referred to genera on analogical grounds so slight that it is impossible to seize their bearing. He maintains as an essential condition for arriving at sound conclusions that the ancient flora must be studied in regard to its continuity with the flora of the present time. The relationship of the tertiary vegetation of Europe with that now existing in other countries is becoming intelligible. Its relations in different directions, while varying from period to period, lie within an area of which it will be possible in the future to assign the limits at any given epoch. Indeed in certain cases this can already be done.

Eocene Europe was a tropical country as much *sui generis* as Central Africa or the Indian Archipelago. To restore the elements of its vegetative physiognomy we must go to regions which have been less influenced than Europe has been by change of climate, and which consequently have preserved plants which it has lost. From what the frontiers retain it will be possible to reconstruct the flora of the central area. But De Saporta justly condemns the attempt to identify in Europe types of vegetation belonging to regions extremely distant from the centre. To introduce into it *Melastomaceae*, the antarctic beeches,

and the Australian *Epacris*—as Unger has done on the strength of a single inconclusive leaf—is to wantonly risk the reputation of a branch of science with a great future before it. Fortunately the process has sometimes brought its own refutation; two plants described by Unger from Radoboj—one being referred to a tropical American genus—were proved by an Aix specimen to be parts of one and the same plant, having a quite different affinity. As to identifications with Australian plants, De Saporta believes that the vegetation of Australia has persisted from a remote antiquity with little change, and that the eocene European flora exhibited a certain parallelism without implying that it was derived. Mr. Bentham, from an examination of the whole question, believes that the possession by many eocene leaves of a general character which is now “more frequent in Australia than elsewhere,” proves, “not any genetic affinity with Australian races, but some similarity of causes producing similarity of adaptive characters. (Address, Linn. Soc., 1870, p. 17.) De Saporta accepts the *Protea*, from Aix, though none appear to be indubitable determinations.

A new source of error in fossil botany is confessed with laudable frankness. An ingenious person employed himself in imprinting leaves with a greasy ink upon pieces of stone which were afterwards etched with an acid. This brought out the nervation and outline of the leaf with a brown colour and in slight relief. De Saporta named ten such specimens, which he now of course withdraws. He declares that the forgeries are easily to be detected. It is to be hoped that this is so; the method certainly looks as if it would be dangerously successful. There is a perverse malignity in adding fresh pitfalls to a subject in which Nature has already done her best to baffle. These forgeries afford a curious test of the value of the interpretations, and it must be admitted that they show no very serious error except in the case—intelligible enough—where a species of maple was fronded on the impression of a small vine-leaf.

The fossil flora of Aix numbers 250 species—Monocotyledons and Dicotyledons bearing about the same proportion as at the present. The vegetation was principally arborescent, with few herbaceous species, and if one may judge from negative evidence like that of Borneo, it was poor in *Compositae*. The principal families were such as characterize tropical vegetation, especially Indian—*Ebenaceae*, *Anacardiaceae*, *Sapindaceae*, *Stenocaulaceae*, *Leguminosae*, &c. The affinities of the ancient gypseous vegetation in respect of generic types, general facies, and composition with that of India and the Indian Archipelago, China, the Philippines, and Japan at the present day are in perfect accordance with the theory that these regions formed the shores of an ancient nummulitic sea, extending from Morocco to Japan, and entirely comprised in the tropical zone of the eocene world, which extended to the 35th parallel. Besides its relation to South Eastern Asia, the Aix flora exhibits, according to De Saporta, a strong affinity with that of Africa, lying between Abyssinia and the Cape.

After the end of the eocene, European climate gradually became more severe. The flora of Eningen, belonging to the upper miocene, is only sub-tropical. Some sub-tropical forms still lingered on into the lower pliocene, as we know from the neighbourhood of Lyons.

As to the annual distribution of climate, De Saporta follows the example of Heer with regard to Eningen, and deduces with more ingenuity than certainty, an alternation of dry and rainy seasons, during the first of which trees cast their foliage as they do now during winter with us, but from a different cause, namely cold.

New Publications.

- BASTIAN, A. *Geographische und Ethnologische Bilder*. Jena: Costenoble.
- BOLOZMANN, L. *Resultate einer Experimental untersuchung ueber das Verhalten nicht leitender Körper unter dem Einflusse elektrischer Kräfte*. Wien: Gerold's Sohn.
- COUES, E. *Key to North American Birds*; containing a concise account of every species of living and fossil Bird. Salem: Naturalists' Agency.
- DALMAS, J. B. *Itinéraire du géologue et du naturaliste dans l'Ardèche*. Paris: Savy.
- DAWSON, J. W. *The Story of the Earth and Man*. Hodder and Stoughton.
- DEMARQUEZ, M. *De l'ostéomyélite dans ses rapports avec l'infection purulente*. Paris: Parent.
- EBERTH, C. J. *Zur Kenntniss der Bacteritischen Mykosen*. Leipzig: Engelmann.
- FERRARI, M. *Riflessi sulla luce, sul calore e sul gas acido carbonico*. Udine: Jacob e Colmegna.
- FILOPANTI, Q. *L'Universo*. Fasc. v. *Il sistema Solare*. Bologna: Monti.
- HINTERBERGER, F. *Ueber das Excretin*. Wien: Gerold's Sohn.

- HIPLER, F. *Spicilegium Copernicium*. Leipzig: Peter.
 HOUEL, J. *Cours de calcul infinitésimal*. Bordeaux: Roques et Gouilleud.
 JOLY, E. A. *Essai sur la physiologie et la pathologie générales de l'hématie*. Paris: Parent.
 KOCH, L. *Die Arachniden Australiens*. Lief. 7. Nürnberg. Bauer und Raspe.
 MILNE-EDWARDS, A., et GRANDIDIER, A. *Description d'un nouveau mammifère insectivore de Madagascar (Geogale aurita)*. Paris: Martinet.
 SCHLEICHER, A. *Die Darwinsche Theorie und die Sprachwissenschaft*. 2^e Auflage. Weimar: Böhlau.
 THIBAUD, L. *Essai sur les propriétés thérapeutiques de l'acide carbonique*. Clermont-Ferrand: Thibaud.
 TOLHAUSEN, A. *Dictionnaire technologique dans les langues française, anglaise, et allemande*. I Partie. Leipzig: Tauchnitz.

History.

Letters and Life of Francis Bacon. By James Spedding. Vol. VI. London: Longmans. 1872.

"HONOUR," says Lord Bacon, in those Essays which so thoroughly give the outline and proportions of his own mind and character, "hath three things in it; the vantage ground to do good; the approach to kings and principal persons; the raising of a man's own fortunes." The great philosopher's climax will perhaps supply the key to the line of action taken by him in public affairs during that section of his life which, beginning in July, 1616, and closing with the year 1618, is the subject matter of Mr. Spedding's sixth volume. Opening with the rise of Villiers to the peerage, it follows the upward course of Bacon's own fortunes in sequence to those of the favourite. On March 7th, 1616-7, Bacon received the Great Seal with the title of Lord Keeper, a title exchanged for the higher rank of Chancellor in the following January at a great banquet given by Buckingham on the occasion of having himself received his patent of Marquis as a new year's gift from James. In July, 1618, Bacon was created Baron Verulam. This volume gives the history of the most prosperous and the busiest period of his career. Arrived at an eminence which afforded full scope for his unwearied industry and transcendent powers, he set himself to fulfil all the demands of his great place with the strong energy of a man to whom, as he himself justly says, "the duties of life are more than life." Not only this, but, small margin for other activity as the claims of that office, so strictly fulfilled, could have left him, one of the most valuable of his occasional works, his proposition for a digest of laws embracing the reform of the whole jurisprudence of England, belongs to the months between June, 1616, and March, 1616-7.

The leading events of English history, as well as those of Bacon's own biography, during this period are already so familiar that the points open to discussion in this volume mainly consist of the editor's own views of a series of well-known facts, with the light in which those facts are set under his comments. As examples of Mr. Spedding's treatment in this kind we may select the remarks upon the Spanish Match, those upon the execution of Raleigh, and the explanations offered touching Bacon's personal relations towards James and Buckingham during the time that he held the Great Seal. The first question, that of the Spanish Marriage, is handled with that consummate ability which we might expect from a writer who has given such ample proof that he possesses in a high degree the necessary qualifications for a task so difficult as a special monograph of Bacon. We may add that here, as elsewhere, in his justification of the Lord Keeper's conduct, not only has Mr. Spedding hit upon the very arguments with which the great lawyer might himself have defended both that piece of State policy, and his own

action in veering round to sanction it, but that his conclusions are drawn with a force and dexterity which may suggest Bacon's own powers of special pleading as reflecting themselves in his biographer. Only, were the conditions propounded by Mr. Spedding as favourable to the Spanish Marriage at all possible in that age, as they might be possible in our own? For what was the real situation? James had from the outset of his reign set himself up before the eyes of Europe as the mainstay and pillar of Protestantism. So far as words went, the King of England stood out as the champion of Lutheranism in Germany, giving proof of his sincerity by a tyrannical anti-Catholic policy in Ireland, by enforcing drastic penal laws against English Catholics in violation of his promises made before he came to the throne. Spain, on the other hand, was not only a great Catholic power, but informed with a spirit ardently militant and propagandist; her sovereign pledged equally by strong religious feeling and close family ties to help forward the Catholic reaction in Germany then organizing under Ferdinand of Austria and Maximilian of Bavaria. In view of these circumstances could a close alliance between the royal houses of England and Spain have been anything better than a monstrous paradox, at once revolting to common-sense and disparaging to the honour of this country? Although in the national resistance to the Spanish Marriage there was doubtless a strong infusion of unreasoning fanaticism, there was also at bottom a strong and wholesome sense of national honour. Even had the amount of religious toleration such an alliance involved been reciprocal, the English people could hardly have borne it. But, its rejection being certain, no demand for equal toleration was made to the Court of Madrid. Other grounds for dissatisfaction apart, this in itself would have involved the King, had he actually carried out his purpose, in endless and hopeless complications with his subjects. Fact-proof in his supreme wisdom, Bacon's master was entirely blind to signs of the times which would have been easily interpreted by any clear-sighted statesman. Bacon himself was not blind. At first he had openly condemned the project, and had honestly expressed his sentiments to the King. But afterwards, when James, anxious to secure the dowry, showed himself bent upon its accomplishment, and formally submitted the scheme to a chosen number of councillors of whom the Attorney-General was one, deliberately quashing his personal scruples, he became an active and useful instrument of the royal pleasure. As we have said, Mr. Spedding's defence of this inconsistency is most carefully elaborated. But unfortunately the effect of the editor's justification is considerably marred by a paragraph immediately following it, which reads like a revelation of the true cause for Bacon's change of tactics:—

"The part which he took in this deliberation (a conference of the Commissioners for the Marriage, March 7th, 1616-7) was probably his last service as Attorney-General. On the 5th of March, the Lord Chancellor, who had long been begging to be relieved from the cares of office, succeeded at last in inducing the King to accept his resignation. He was allowed to deliver up the Great Seal on the 6th, and on the 7th it was given, with the title of Lord Keeper, to Bacon." P. 151.

Here we see Bacon at last grasping the splendid prize, on which doubtless his heart had long been set. That prize was his by just right. Great learning, legal acuteness, and splendid genius—all these qualities constituted him the man in the whole kingdom best fitted for that office. And yet the question presents itself; Would a servant of James who had dared to cross any cherished plan of his master's have achieved that elevation solely in right of high qualifications; would the Great Seal at that particular juncture have passed into Bacon's hands had he not shown himself servilely willing

to sacrifice on a great political question both his personal honour and the honour of England?

Upon another point, that of the necessity for Raleigh's execution, Mr. Spedding's exhaustive and masterly summary of the facts should, we think, close all controversy. With our present knowledge of the circumstances it is clear that Raleigh was guilty of freebooting, and that, being guilty, his punishment was by the law of nations a righteous act. Mr. Spedding appears anxious to clear the King in this unfortunate business, and holds him blameworthy only in refusing, against the advice of his Council, to let proceedings against Raleigh be taken in a court thrown open, partially at least, to the public. Mr. Gardiner, on the other hand, strongly insists upon the King's culpability in countenancing an enterprise which might bring on hostilities with Spain without having procured trustworthy information respecting the course of Spanish colonization in Guiana. This charge Mr. Spedding passes over in silence, contenting himself with criticising a hyperbolic phrase employed by Mr. Gardiner. Again, too, can James be any way justified in the matter of granting a dangerous commission to a convicted traitor—a man in the eye of the law civilly dead? Had the King, acting with common-sense and common generosity, granted Raleigh a free pardon before despatching him in quest of a gold mine, the issue of the affair might have been less deplorable. He could then have been legally put upon his trial for the outrage committed at St. Thomé, and the people would have acquiesced in his execution as an act of justice. But, blunderingly as the matter was conducted, could Raleigh have seemed to them other than a great and brave Englishman brought to the block through a machinery of legal fence and quibble, and this solely in propitiation of a detested foreign power? Much of Mr. Spedding's ingenious and elaborate argument for James's Government leads up to a vindication of the famous despatch after Raleigh's execution, charging the English ambassador at Madrid to let the Spaniards know that, able man as Raleigh was "to have done his Majesty service, if he should have been pleased to employ him"; yet to give them content he hath not spared him, when by preserving him, he might have given great satisfaction to his subjects, and had at his command as useful a man as served any prince in Christendom." Words like these, we venture to think, stand out from editorial comments in open and honest distinctness. They offer their own "true and natural interpretation," and refuse to be read in any other light. That letter, which has stirred the indignation of all English historians of the transaction, surely goes far to justify the bitter popular feeling at the time. If mere justice were dealt to a criminal, what need for this abject protest; if complaisance to a foreign power did really help on the catastrophe, in Raleigh's death, however justifiable in itself, was not the honour and dignity of England actually prostrated to the vengeance of Spain? It is noteworthy that Bacon, who took the chief part in framing the Declaration put forth by Government to justify the execution, has in his correspondence during Raleigh's trial kept strict silence upon the matter.

Bacon's conception of the "approach to kings and principal persons" as an essential component of honour is illustrated in mournful wise by his own correspondence with James and the favourite—a set of letters which, taken as a whole, irresistibly bring to mind the verdict passed upon the political correspondence of a great ancient,—one who, like our great modern, so completely fascinates the imagination through the splendour of his intellect that we can hardly accept him as the adroit flatterer and slippery statesman which stands revealed in his political letters. What has been said of Cicero justly applies to Bacon: had

that part of his correspondence been reduced to tinder, the loss to posterity would have been so much gain to his reputation. Never surely was terse and compact English, with a native elevation of style, put to such servile use as by James's Lord Keeper. Flattery was perhaps inevitable; no man could have approached the King without paying tribute in that base but current coin of the age. But these letters betray a meanness of spirit which goes deeper than formal complaisance. They give the terms upon which Bacon was willing to keep Court favour; when, too, he had happened to take the wrong side in Coke's matrimonial quarrel and that favour was in consequence withdrawn, they exhibit him suing for its recovery with abject and slavish submission; they reveal him straining his legal dexterity to the utmost for the purpose of enriching the favourite and the favourite's creatures; they show him in so flagrant a matter as Mompesson's monopoly-patent making no stand whatever against an enormous abuse, but only anxious to secure himself against undivided blame by procuring that it should "pass other judgments than his own." But the dishonour culminates in that portion of the correspondence which throws light upon what Mr. Spedding mildly terms "Buckingham's bad habit" of tampering with Bacon's decisions in his own Court of Chancery. The Chancellor had surely enough worldly sagacity to know how pernicious must be the constant interference of an omnipotent minister of the Crown in causes actually under legal discussion; to know that in being subjected to such interference not only was his judicial position dangerously compromised, but that his judicial integrity might at any time give way under too strong a pressure. To enlighten him upon this article of professional ethics he surely stood in no need of a code either of official honour or of personal morality in advance of his age. To us it seems that he yielded on so vital a point as he yielded on others, simply because only at that price could he keep Court favour; because only through that favour, and not through his high personal merits, could he hold the "vantage ground to do good" in public service of his country which he sincerely loved, and other things which it is to be feared he loved as well, if not better—office with its train of show and glitter, its "much ado and a great deal of world," which he mentions so complacently to Buckingham; those riches of which he has elsewhere written in the fulness of his own sad experience that they are the *impedimenta* and hindrances to virtue. After all, with all his compliances, it is doubtful whether Bacon even in these years of his life, when outwardly he stands high in his master's goodwill, had in reality achieved more than a hollow and heartless show of royal favour. Signs are not wanting here, though we have not space to point them out, that James, while he availed himself of his Chancellor's genius, secretly recoiled from it in that mingled disturbance and irritation which, as Coleridge finely remarks, contact with genius excites in natures too mean and too self-centred to be capable of true homage before it. This, we think, will explain the King's frequent attitude of self-assertion; the barely concealed jealousy which prompts him to thwart Bacon at every turn with his own petty and peddling interference, and, whenever occasion offers, his eager willingness to humble his illustrious servant.

Bacon's conception of honour is, as we have seen, purely material. It may be justly defined as worldly prosperity at its highest pitch. Montesquieu's ideal of honour in a servant of the Crown is, on the other hand, strictly ethical. He considers loyal and strict obedience to the Prince as one of its main elements. This proposition the English philosopher would doubtless have been ready to accept. But we question whether he would have as readily followed

the Frenchman when he insists upon the statesman's honour in a finer sense; that quality which taking, as he says, the form of high and heroic courage, withstands the commands of the sovereign whenever those commands clash with the supreme law of conscience and of personal integrity. For, after all that could fairly have been said in Bacon's behalf has been said by so able an advocate as Mr. Spedding, we must still hold that at the essence of his character there was a fatal incapacity for this fine sense of honour. More than one man among Bacon's predecessors in office had given signal examples of the virtue. Within his own century the Chancellor of Henry VIII., obeying its inspiration, had stripped himself of power and place, and so doing, left his name a glory on a dark page of English history; lacking that inspiration, the Chancellor of James I. set at barter against power and place the nobility of his own soul, and so doing, left his great name a focus for the meanness and the baseness of one of its most shameful pages.

GEORGE WARING.

Historical Sketches by J. H. Newman, D.D. 2 vols. Pickering, London. 1872.

DR. NEWMAN told us in the preface to his *Occasional Verses* that he included everything he had written because he found himself unable to estimate the comparative value of different pieces. Perhaps he would justify the publication of the present collection upon a similar principle, and it is certainly curious that such a wide diversity of positive substantial worth in the matter should co-exist with such an uniform excellence of manner. One great charm of Dr. Newman's writings is that he looks at all things by the same light—a light which he carries with him and holds as he pleases; the light is always clear and always pleasant to the eyes, but there is less certainty about the importance of the objects it shows and of the side (or corner) of them which it happens to fall upon. The result of this uncertainty is a sort of unreality; the writer's view is coherent and plausible, it might almost be said to be reasonably well established, and yet, taking it as a whole, it is more or less out of relation to the principal facts; sometimes it is not even inconsistent with them, it simply leaves them out. Perhaps the extremest instance of this is the series of papers on "Convocation," reprinted from the *British Magazine*. The writer is much more in earnest about the indecorum of priests resisting bishops than about the turpitude of bishops playing into the hands of a latitudinarian ministry; and when he comes to discuss the burning question of the relation of Convocation to the Crown, he winds up with the decision that the purely apostolical power of the Church is still intact—that in matters merely ecclesiastical she still exercises a concurrent jurisdiction, e.g., in the so-called Spiritual Courts, though it is an anomaly that the power of excommunication should rest with them, and consequently the writer has "no wish to contend that the existing state of the law is in every part as consistent as the theory of it is just." The fact is that when Dr. Newman had compiled a trustworthy account of the history of the quarrel he did not care to help his readers to understand the actual state of the question—he preferred to give them something which was safe and edifying for them as Churchmen to think about it. Again, the paper on "Mediæval Oxford" is beautifully written, but it is written exclusively in the interest of the thesis that Oxford is a "survival" from the Middle Ages, and if she is to be true to herself must always remain old-fashioned and appear behind-hand. Here of course there is some excuse for a *parti pris*, though we believe, as a matter of fact, that Laud's energetic organization of the university has had more to do with its

conservatism than the number of colleges which can be proved to be transformed or resuscitated monasteries. It is difficult to form any conclusion about the beautiful fragment on the "Northmen and Normans in England and Ireland," except that its incompleteness is a reason for regretting that the writer suddenly ceased to be editor of the *Rambler*. The parallel between Ireland and England as the most civilized portions of Christendom until they were attacked by the Northmen is very suggestive; it is founded on unquestionable data, but it leaves one large class of facts altogether in the background. We can hardly doubt that society in Gaul and the Rhineland was still much more highly organized than it was in England under the Heptarchy, when Alcuin was less illiterate than any man Charlemagne could find in his own dominions to preside over the School of the Palace. And it is surely a hazardous inference that Ireland as a whole was more civilized than England as a whole in the eleventh century because slaves were exported to Bristol from Ireland. Apprentices, who did not practically differ from slaves, and even political prisoners, were exported to the plantations in the seventeenth and even in the eighteenth century: does this prove that America and the West Indies were more civilized than England? And it might be a further question whether it is the most important point we want to know about the Norman conquests of both islands, whether the Holy See was justified in sanctioning them, though of course it is a fair point that if there was justification for either there was justification for both, and that of the two the Norman conquest of England produced far more immediate suffering than the Norman conquest of Ireland. But it is a one-sided statement that it was the Tudor, not the Plantagenet, that begun the Iron Age of Ireland. No doubt up to the Reformation the natives were able to assimilate the conquerors, and afterwards they were only able to brutalize them; no doubt till then the Irish retained at least one privilege—their conquerors only made them miserable in ways that they could understand; but for all that they were miserable. The Burkes and the Geraldines and the rest were content to administer Irish institutions; but they administered them badly—the people had to support all the burdens of government, and they received hardly any of its benefits. There was a constant appeal to the English crown from the suffering Commons both English and Irish; they entreated, and always in vain, that the Lord Paramount would give them the benefit of law and order. Though the later conquests did far more to break down Irish civilization than to set up English; though the material development of even the English colony was seriously hampered by the jealousy of the mother country, it can hardly be doubted, if we compare the eighteenth century with the fifteenth, that relatively as well as positively the land had become less poor in becoming less Irish.

The greater part of the first volume is taken up with a reprint of the series of letters on university matters which appeared in the *Gazette* of the University of which Dr. Newman was rector when he wrote them, and were published in 1856 under the title of "Office and Work of Universities." The title has been altered in the present edition to "Rise and Progress of Universities," which the writer regards as more accurate; and perhaps it is as accurate a title as could be given to what is really a series of considerations drawn from the experience of all previous universities for the encouragement and guidance of the Catholic University of Dublin. The book contains a great deal of clear and brilliant writing; the best bit in it is the report which the agent of a London company might make if sent out to prospect in Attica. One idea runs through all the book, that the essence of an university is teachers who can attract learners; that

everything else—degrees, endowments, discipline, the collegiate system—is in a sense secondary; they may be necessary to the integrity of the university, to its well-being, but not to its being. This suggests more than one observation. The writer does not give nearly weight enough to the fact that universities were once a necessity of knowledge, and now are only a luxury. Knowledge can exist and increase without them, though an enthusiast might maintain that it can reach a more exquisite perfection in them than elsewhere. He seems to suppose it possible for universities to maintain themselves without material inducements of any kind; it was possible once—experience shows that it is not possible now. Again, the ideal relation between colleges and universities, between tutors and professors, is attractively sketched; but the writer stops short of the question, Who is to attend the professors' lectures if all students are to be members of colleges, prepared for their arts' degree by college tutors? It would be unreasonable to compare his account of the transformation of mediæval education with M. Rénan's in *Averrhoes et l'Averrhoïsme*, or to insist too much on the indistinctness with which he slurs over the contrasts which existed between the Athens of Socrates and the Athens of Cicero, and even between the Athens of Eunapius and the Athens of Proclus.

As might be expected from his position, Dr. Newman lays great stress on the action of the Holy See in fostering university education. The point he selects for special eulogy is the readiness of popes, among the most pressing embarrassments of the present, to provide for a distant future. No doubt they have always been ready to give such plans a thoughtful sanction; sometimes the initiative has been their own; in either case when the plans have succeeded their successors have always been there, and probably they always will be, to claim the credit of the success, and this of itself gives them a great advantage over other founders and benefactors; and the plans have succeeded quite often enough to make the characteristic an useful one, but it is certainly not a proof, to outsiders it is hardly a presumption of any supernatural insight in its possessors.

There is another instance of the same subjective way of looking at things in the very striking lecture on the "Pope and the Turk": the perpetual appeal to Christendom against the Turk and the Turk only, not against the Saracen, not against the Tartar, kept up without intermission from St. Gregory VII. to St. Pius V., undeniably makes a subject for a very telling and impressive picture, and it need not be said that Dr. Newman treats it like a master. If we could regard it as exclusively addressed to Roman Catholics there would be nothing more to be said. Other readers have a right to remember that the Turks were the first Mahometan power which seriously impeded pilgrimage to the Holy Places, that afterwards they were the only Mahometan power which menaced the establishments of Western Christendom in the Levant, that the Popes preached many other Crusades, and that the Western powers tried the experiment fairly before they gave it up as too hard for their resources and their virtue, and lastly, that the Popes themselves were very far from making the Holy War the sole or the chief object of their administration.

The whole series of the lectures upon the Turks is at bottom simply a marvellous *tour de force*. The Crimean war had just made the Turks a subject of general thought, so Dr. Newman read up all the French and English authorities upon their history and their relation to Europe, compressed the result into a readable and intelligible form with a mastery less ostentatious than Gibbon's and hardly less astonishing, and proceeded to distil from the whole the maximum of sufficient reasons for thinking ill of them and

hardly wishing well to them. The main thesis of the book is that the Turks are a Tartar tribe who have intruded themselves into Europe, where as might be expected they have done nothing but mischief, and whence they will be certainly and justly expelled as irreclaimable barbarians. It would be unreasonable to complain of the writer for not recognizing that there has always been a comparatively sedentary population in Turkestan, and that Central Asia has never been wholly abandoned to Nomads. Still even if we assume that this population was purely Aryan, the Turkish race must have been much affected by intermarriages before they crossed the Oxus, and granting the Turks to have been pure Mongols it is probable that the mixture of race had more to do with the disappearance of their ugliness than even the delightful climate of Sogdiana. But the Turks were to bear the whole blame of the devastation of Greece and Asia Minor (and of the Danubian Principalities, where no Turk has ever settled), and accordingly their Tartar origin is insisted upon again and again. It is hardly necessary to point out that Greece was ruined before the Turks set foot in it, that even in Asia Minor the population had been thinned by Byzantine fiscal oppression, and by the excessive estates of the nobility, to say nothing of the desolating slave-hunts of the Caliphs, long before the invasion of Alp Arslan, and that Mr. Finlay is not alone in attributing the rapid progress of the Osmanlis under the first sultans to the fact that the peaceable and industrious population found it easier to thrive under their rule than under the decrepit despotism of the Palæologi. Again, it was certainly relevant to the writer's thesis that 2,500 Turks thought it quite natural in the sixteenth century to be routed by 500 musqueteers; but he should have remembered that in the fifteenth Mahomet the Second had had the most formidable artillery in Europe. And as the order of Janissaries had become hereditary long before their extinction, it is hard that Mahmoud should be charged by implication with the guilt of the apostacy of the victims of his massacres.

The essay on Cicero, which was written in haste for the *Encyclopædia Metropolitana* nearly fifty years ago, presents with a good deal of delicacy and feeling what were then the accepted facts about his life and writings; the most remarkable points about it are the decision with which his admiring biographer sacrifices his reputation as a statesman, and a passage in which the Latin language is appreciated with a somewhat extreme severity. The other article contributed to the *Encyclopædia*, on Apollonius of Tyana, treats his personality just fully enough to show that it was not written exclusively in support of the easy thesis that the romance of Philostorgius does not affect the credibility of the canonical gospels. The remainder of the volume is taken up with the polemical chapters of the Church of the Fathers here printed separately under the title "Primitive Christianity." They are vigorously written, and it is a triumph for the writer that their substance already seems hackneyed. The section on Jovinian and other pseudo-Protestants of the fourth century is amusing still. G. A. SIMCOX.

Intelligence.

M. Nasilevsky has published in the Russian Journal of the Ministry of Instruction a historical article on the relations between Byzantium and the Petchenegs.

The Annual of the Polish Society of History and Literature in Paris re-appears after an interval of three years. It is at present published by the house Zupanski, of Posen. Among other interesting matter it contains the correspondence of Stanislaus Augustus, from 1784 to 1792; and the correspondence of Joachim Lelewel with Charles Sienkiewicz.

One of the most interesting of recent publications relating to Slavonic history is that of the *Fontes Rerum Bohemicarum*. Three numbers have already appeared, containing the lives of the saints in the original

text with a translation in Bohemian. Of a similar character are the *Reliquia tabularum terræ regni Bohemia*, of which five numbers have appeared in quarto, and the *Regesta diplomatica nec non epistolaria Bohemia et Moravia*. Both these collections are edited by M. Emler, conservator of the archives of the city of Prague.

New Publications.

- BAGEHOT, W. Physics and Politics. (International Series II). King.
 BEER, A. Friedrich der Grosse u. Van Swieten. Leipzig: Duncker u. Humblot.
 BRESSLAU, Dr. Jahrbücher der deutschen Geschichte unter Heinrich II. Leipzig: Duncker u. Humblot.
 DIE PREUSSISCHE EXPEDITION NACH OST-ASIEN, nach amtlichen Quellen. Mit 1 Karte. III. Bd. Berlin: Decker.
 FONTES RERUM AUSTRIACARUM. 2te Abth. Diplomataria et Acta 27 Bd. Urkundenbuch d. ehemal. Cisterciensstiftes Goldenkron in Böhmen. Wien: Gerold's Sohn.
 HATHE, Th. Neuere Geschichte von Sachsen. 1806-66. Gotha: Perthes.
 KOSKINEN, G. Geschichte von Finnland. Leipzig: Duncker u. Humblot.
 LEIST, B. W. Das prätorische Erbsystem im classischen, nachclassischen, u. heutigen Rechte. Erlangen: Palm u. Encke.
 MONUMENTA HISTORICA EPISCOPATUS ZAGRABIENSIS. Saec. xii. et xiii. Ed. J. B. Tkalcic. Vol. I. (Mit Titel u. Vorrede in kroat. Sprache). Agram: Suppar.
 KOLLS SERIES. Calendar of State Papers, domestic series, of the reigns of Elizabeth and James I. Addenda—1580-1625. Preserved in H.M. Public Record Office. Ed. by Mary Anne Everett Green. Longmans.
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 TWISTEN, C. Die religiösen, politischen u. socialen Ideen der asiatischen Culturvölker u. der Aegypter in ihrer historischen Entwicklung. Berlin: Dümmler.
 VÁMBÉRY, A. Bokhara: its History and Conquest. King.
 VON HELFERT, J. A. Maria Louise, Erzherzogin von Oesterreich, Kaiserin der Franzosen. Mit Benützung von Briefen an ihre Aeltern, u. von Schriftstücken des k.k. Haus-Hof-u. Staats-Archives. Wien: Braumüller.
 VON RANKE, L. Aus dem Briefwechsel Friedrichs IV. mit Bunsen. Leipzig: Duncker u. Humblot.
 VON RANKE, L. Die Genesis des preussischen Staates. Leipzig: Duncker u. Humblot.
 VON SIVERS, Jeger: "Smilkn," ein Beitrag für die Entwicklungsgeschichte Livlands. Riga: Kymmel.
 VON WURSTENBERGER, L. Die gegenwärtigen Agrarverhältnisse Russlands. Leipzig: Duncker u. Humblot.
 WOOD, Capt. J. A Journey to the Source of the River Oxus, by the Indus, Kabul, and Badakhshan. New Ed., with Essay on the Geography of the Valley of the Oxus, by Col. Yule. Murray.

Philology.

Thirteen Satires of Juvenal. With a Commentary by John E. B. Mayor, M.A., Fellow of St. John's College, Cambridge. Second edition, enlarged. Part II. London: Macmillan and Co. 1872.

THE second part of the new edition of Mr. Mayor's Juvenal will be a disappointment to those who had looked forward to a continuation of the commentary on the same scale on which it was commenced. With the exhaustive note on Recitations which was begun in the first part, this style of commentary for the present ends, and though we are promised that the tenth satire shall be treated as fully as the first, yet the remainder of the notes are more on the scale of the first edition; and the whole work sinks back to the level of a school book, however excellent of its kind, instead of being the comprehensive commentary on the literature of the silver age for which we had been led to look. The critical notes are also deferred to a future edition, and we are for the most part left to conjecture the grounds on which Mr. Mayor has been led to deviate in many places from the readings of Jahn, whom he followed almost implicitly in his previous edition.

But yet this new issue is something better than a mere reprint. Besides the improvement in the text, which was

dwelt upon in a former number of the *Academy*, the present part bears constant marks of twenty years' diligence, in the study of the silver age; and in several places Mr. Mayor has boldly, and for the most part advantageously, changed his views about disputed passages. There will probably, for instance, be few scholars who may not learn something new from his fresh notes about the assumption of divine honours by the Emperor (Sat. iv., 71); on the semestris tribunatus (Sat. vii., 88); or on Bellona (Sat. iv., 124). On Sat. iii., 218, he happily lays aside his usual reticence about readings, and gives his reasons, supported by the weight of Mr. Munro's authority, for adopting Roth's conjecture, "*Phacasiatorum vetera ornamenta deorum*," as the most probable solution of the various readings of the MSS. It could have been wished that he had shown the same readiness to explain his reason for abandoning Ritter's conjecture, "*Discipulamque senex*," in v. 117 of the same satire, which he formerly maintained to be a necessary emendation: but such inconsistencies follow naturally on the undecided plan on which the book is composed. In Sat. v., 153—155, it is satisfactory to find that he not only gives up the somewhat prosaic view that Juvenal is speaking of a recruit learning drill from one Serjeant Capella, but that he has overcome the difficulty of understanding *ab capella*, instead of *ex capella*, to be "from a goat's back," by adducing two unquestionable parallels from no less authorities than Ovid and Propertius. On Sat. vii., 165, he resigns the reading, "*accipe, quid do*," of which he formerly gave a very forced and artificial rendering—in favour of the simpler "*quod do*;" though at the same time he quotes a novel and at least ingenious explanation of the harder reading suggested by Mr. Munro. On Sat. iv., 122, he gives a new view of the meaning of "*velaria*," as meaning not the awning itself, but "the upper part of the theatre or amphitheatre over which the awnings were stretched." Other passages might be quoted where the present is an improvement on the old edition, but it is not what it promised to be, and, even though it prove to be the best edition of the Satirist, it must yet be always an ill-proportioned book, too large for the requirements of the ordinary student, yet inadequate to satisfy the expectations which it began by holding out.

J. R. KING.

Intelligence.

The *Journal of the Royal Asiatic Society*, vol. vii., part 2, contains a description by Professor Wright of a Syriac translation of the famous *Kalilah v' Dimnah*, hitherto wholly unknown, and found in a MS. of the library of Trinity College, Dublin. The translation is made from one of the first redactions of the later Arabic. From the specimen given by Dr. Wright in Syriac and English, containing the story of the lion and the ox, and accompanied by interesting notes, it is evident that an edition of the entire work, which, we believe, this eminent Semitic scholar intends to publish, would be of much importance for Syriac lexicography, and no doubt also for the history of the Arabic translation of *Kalilah v' Dimnah*.

Lettres assyriologiques, seconde serie, par François Lenormant. Paris: Maisonneuve. The new series of M. Lenormant's *Lettres* consists of two volumes, to be followed by a third, bearing the second title *Études accadiennes*. They contain a systematic exposition of Accadian grammar, which is at once full, able, and clear. The work will be most useful to cuneiform students, and we hope will be printed in a more readable form: lithographed handwriting is not pleasant to peruse. We would note that the postposition which answered to the Assyrian *cima* "like" was *tum* or *dim* in Accadian, not *gim*; and that one form of the substantive verb was *gal*, not *ik*, affording an instance of the interchange between *l* and *n*. We believe that the views expressed throughout the work are just and accurate; and it is with especial satisfaction that we find the author (p. 20) brought by the evidence of the bilingual grammatical tablets to say: "I must remark by the way that they justify Hincks against M. Oppert on the two essential points of controversy between these eminent scholars, the existence in Assyrian of a Permanent formed like the Preterite of the other Semitic languages, and of a Kal Present with the second radical doubled, that is almost exactly like

the Pael and differing only in the Vocalisation." Another scholar who had devoted his attention to the lexical and grammatical side of the monuments, the late Mr. Norris, had come also to the same conclusions. In a letter written shortly before his death, he says, "I have always believed in Hincks's Permansive, but do not like the name. I believe in a Future or Present tense used for either tense, the added *u* and *uni* making both indirect."—A. H. S.

Another of the great lexicographical enterprises of the Oxford University Press is making satisfactory progress towards completion. This is the Hebrew-Arabic dictionary of Ibn Janāh, edited by Ad. Neubauer, the first fasciculus of which is announced below. The sale of the Oxford Sanskrit-English dictionary by Prof. M. Williams is reported to have been so considerable, that the author is already meditating a new edition.

The deaths are announced of M. Stanislas Julien, the veteran Sinologue, and Prof. Julius Fürst, the Hebraist.

New Publications.

ABU'L-WALID, Marwān Ibn Janāh. The Book of Hebrew Roots. Now first edited, with an appendix, containing extracts from other Hebrew-Arabic dictionaries, by Ad. Neubauer. Fascic. I. Oxford: Clarendon Press.

RYSSEL, V. Die synonyma des Wahren u. Guten in den Semitschen Sprachen.

TRANSACTIONS of the Society of Biblical Archaeology. Vol. I. Longmans.

WILHELM, E. De infinitivi linguarum sanscritæ, bactricæ, persicæ, græcæ, oscæ, umbricæ, latinæ, goticæ forma et usu. Eisenach: Bacmeister.

ERRATA IN No. 66.

- Page 65 (a) line 30, for "so mething" read "something."
 " " " " 64, " "femmelibre" read "femme libre."
 " 70 (a) " 21, " "Gauthierhas" read "Gauthier has."
 " " (b) " 7, " "beft" read "Heft."
 " " " 24, " "Nautokite" read "Nantokite."
 " " " 35, " "Cyanite" read "Kyanite."
 " " " 57, " "Chemica" read "Chimica."
 " 71 (a) last line but one, for "Bedentung" read "Bedeutung."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 67.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

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REGISTERED FOR

SATURDAY, MARCH 15, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Biographical and Critical Essays. By A. Hayward. (Second Series.) Longman & Co.

"To the merit of novelty," says the author in his preface, "whether of facts or arguments, he can prefer but a very trifling claim. To compress scattered and curious information, and, if possible, to amuse, have been the primary objects of the author. The result is an agreeable addition to popular literature, containing a good deal that will be new as well as interesting to the class of readers for whose amusement he is in the habit of catering." The author is Mr. Jesse, who has written some Memoirs of Richard III., and we have quoted Mr. Hayward's appreciation of them because it serves exactly to characterize the most prominent merit of his own two handsome volumes. Mr. Hayward goes on to say, "If the life of Richard was to be rewritten at all, the task should have been undertaken in a more serious and meditative mood, with a full sense of its responsibilities, and a keener insight into the complex causes of the strange notions of right and wrong, legality and illegality, which marked the period in dispute."

Since Mr. Hayward has reprinted his essays he cannot object to be judged by his own standard; and certainly, whatever their other merits, insight is not one of them, and we think a stronger sense of responsibility would have made them as thorough as they are clear, sober, accurate, and readable. For instance, if Sainte Beuve, who was a layman, had written on the author of the penal code of Louisiana, he would have been more careful to form an estimate of his rank and characteristics as a jurist than to reproduce his sensational argument against capital punishment, and his equally sensational placards for the cells of murderers; perhaps, too, he would have refrained, even in 1864, from sneers at American institutions many of which are already obsolete. We doubt again whether Sainte Beuve would have been content to re-issue an essay on Marie Antoinette printed in 1859 without making use of her authentic correspondence, which has been edited by Von Arneth in reply to the apocryphal letters to which M. Feuillet de Conches stood godfather, or whether he would have ever been content, if he spoke at all of the charge that she desired and

invited the invasion of France, to have spoken so vaguely and evasively as Mr. Hayward. As it stands the essay deals mostly with the scandal about her married life before the Revolution. Lord Holland, who was in a position to check Madame de Campan's narrative, said that her loyalty had made her disingenuous, and that in conversation she was comparatively frank. Lord Holland may have been mistaken, but Mr. Hayward fails to set aside his evidence by proving that there were people who derived an opposite impression from Madame de Campan's conversation; she may have been more or less unreserved at different times and to different persons.

The essay on Richard III. gives no intelligible impression of his character as a whole, but proves that Shakspeare followed More pretty closely (which would be more important if we knew whom More had to follow), and gives some picturesque details about the fight at Bosworth from Nicholl's edition of Hutton. That on the Countess of Albany and Alfieri tells all that most people would care to know about the *amour* from Von Reumont's book and St. René Taillandier's articles in the *Revue des deux Mondes*; admirers of Alfieri might complain that the depth of his passion was underrated.

Perhaps the most substantial thing in the book is the elaborate reply to Parkes' and Merivale's memoirs of Sir Philip Francis. Mr. Hayward leans to the theory that Earl Temple wrote or inspired the Junius Letters, and he reproduces in an appendix the letter which appeared in the *Times* a few days ago, giving the Lord Aberdeen's authority for Pitt's contradiction of the Francis theory. The principal arguments against that theory are very effectively stated. It is shown that if Francis was Junius he must have been something like a psychological monstrosity, a combination of cowardly temerity, fatuous mendacity, and motiveless malignity, and yet with all this that he contrived to thrive by subservience in his own name while posing as a model of grandiose independence under his *nom de plume*. It is shown also that of the numerous coincidences, which the advocates of that theory rely upon, many are indecisive and not a few apocryphal; more stress than it will bear is laid upon the fact that Francis affected dissipated habits and had plenty to do in the War Office. Gentz was dissipated, and wrote quite as elaborately as Junius in the fragments of his time.

The essays on Gentz and George Canning as a man of letters give a good deal of information pleasantly. They both suggest the reflection what a shabby, stupid business most of the resistance to Napoleon really was, though the *Tugend Bund* made it respectable in Germany for a year or two, and Wellington in the Peninsula for four or five. The haughtiest nobility in Europe were delighted to pay and pamper a dissipated sentimental pamphleteer (who to be sure was a very agreeable confidant) into an European personage because there was no one else who could make their case look plausible on paper; even the British aristocracy "keeping the continent at bay with their backs against the wall," as Mr. Henry Kingsley has it, were glad to see him to get up their budgets for them. Compared with Gentz, Canning was one of themselves; his useful squibs and his connection with Pitt gave him a right to cultivate and display to the utmost his admirable talent for the highest eloquence of the best debating clubs; but it was only the intellectual poverty which drove them to Gentz that made it possible for Canning to force his way to the premiership, and even gave his party reason to regret that they managed to keep him out so long. Mr. Hayward is too good a Tory to make these reflections himself, but it was surely a needless concession to virtue to insist that Gentz would have been happier if he had been frugal enough to decline presents; of course it was foolish of him to play high, but to mortify his taste for cooks and carriages would have cost him more in the way of self-denial than he would ever have gained in the way of self-respect.

The point best worth noticing in the paper on Marshal Saxe is the discussion of the Battle of Fontenoy. Mr. Hayward hardly succeeds in refuting the Duke of Richelieu's story, which owes its currency to Voltaire, and is repeated by Mr. Carlyle; but he shows clearly that Marshal Saxe's story was accepted at the time by the King and everybody else; in short, we have the alternative of believing that the Duke of Richelieu's memory leant itself to some pardonable exaggeration of the part that he had played, or that Saxe less pardonably distorted all the official accounts of the battle. It is difficult to decide whether the essay on Dumas or that on Maria Edgeworth is the greatest service to the public; the first contains the cream of twenty-four volumes, the second contains the cream of three; but Dumas' memoirs are published, and Miss Edgeworth's are not. Again, in criticizing Dumas Mr. Hayward had only to bring the average opinion of his own generation into focus; in dealing with Miss Edgeworth he had to perform the same function for a generation which has passed away. In the latter case it would have increased our obligations to him if he had compared Miss Edgeworth's talent with Miss Austen's and Mrs. Gore's, neither of whom, though their strength was widely different, ever weighted it with such an enormous mass of copy-book morality.

The essay on Whist we fear will be mischievous. It contains many interesting anecdotes of the game, and a clear exposition of the long suit system, and a proof that it must be the foundation of all first-rate play; but the writer does not consider the disturbance which its universal adoption would produce among many estimable players who have been used to conduct an intelligible and interesting game on the principle of making their own and their partner's court cards and spoiling those of their enemies, to say nothing of the ulterior danger that under the long suit system whist among inferior players would become monotonous and mechanical. But perhaps Mr. Hayward is of opinion that here to owe cannot help entering upon a period of decadence; it may be that there are no first-rate whist-players under forty, as there are no first-rate poets, painters, or politicians. This lamentable observation occurs in the

paper on Sir Henry Holland's recollections, which leaves the impression that the reviewer liked and respected his author too much to let slip any opportunity for a bit of deferential sparring.

The articles which will have most permanent value are the short notices of Van de Weyer, Lord Lansdowne, Lady Palmerston, and Lord Dalling. The last contains some truly charming letters to the Princess of Lichtenstein, then Marie Fox, and the Countess de Puliga, then Henriette Sanson, and known by her success in private theatricals. Here are some remarks on marriage from a letter to the former:—

"Love, in its passionate meaning, is not required. I will give you a simile which I gathered from a water establishment. Apply a cold, not icy, piece of wet linen to your chest, and cover it nicely over, it gets warmer and warmer, and at last produces perspiration. Put on a hot one, and it gets colder and colder, until it gives you the rheumatism. Passion decreases after passing too often through the madness of jealousy. Liking and affection increase—increase constantly, even in spite of bad temper, which is the greatest enemy to happy association."

We should never leave off if we were to begin quoting from the two sparkling papers on the Pearls and Mock Pearls of History, and the Varieties of Literature and Art, each of which is placed at the beginning of a volume; but we cordially recommend them and all the rest of the book, except perhaps the paper on Junius, to the large and increasing class of readers who, like a celebrated Athenian epicure, prefer to have their food chewed for them.

G. A. SIMCOX.

NOTES ON LITERATURE.

Fraülein Ludmilla Assing, well known through her share in preparing the Varnhagen correspondence for publication, is at present engaged in editing the correspondence and literary remains of a more extraordinary if a less eminent personage, the Prince Pückler-Muskau, author of the once famous *Briefe eines Verstorbenen*, and the original of Immermann's satire. The mere biography of such a hero would scarcely call for notice, as the social celebrity which he laboriously achieved was only a caricature of that of Byron or Alfieri, with a double portion of extravagance to make amends for the lack of genius. But he was in correspondence with a good many of the celebrities of his time, and it was thought that his correspondence would contain some details of interest for the literary history of the century. This is true to a certain extent, though they are smothered in a mass of trivial *Liebes-Briefchen* of no intrinsic value, and of which the publication shows, to say the least, a curious conception of decorum. Apart from his eccentricities, the prince was chiefly famous for the marvels of landscape gardening executed under his superintendence at Muskau; on these he spent two fortunes, his own and his wife's, and as they were still incomplete, procured her consent to a divorce, that he might marry another heiress, for which purpose he came to England. The *Briefe eines Verstorbenen* were addressed to her to whom he had died in this singular manner, but the main purpose of his journey was not fulfilled. The most amusing part of the correspondence is that between Pückler-Muskau and Bettina von Arnim; but the extravagancies of the lady seem to have had a sobering effect upon her friend, who was not accustomed to being outdone in his own line. Bettina's accounts of her relations with Schleiermacher in some of the letters are *abenteuerlich* to a degree.

The February number of the *Atlantic* reproduces the almost forgotten story of Bettina's English translation of the *Briefwechsel mit einem Kinde*, how in disgust with the prosaic language of an Oxford and a Cambridge student whom she successively employed to translate her favourite rhapsodies, she resolved to learn English and to do the work herself, and actually did so, in language that was sometimes pathetic in its grammatical unreason. A colossal edition of 10,000 copies of this remarkable production was shipped without warning to this country, addressed to Messrs. Longmans & Co., who, sad to say,

declined to receive it, and not being ransomed, the consignment was finally sold for waste paper, as unclaimed stock. This and the following number of the same magazine also contain some interesting recollections by Mr. R. D. Owen of his father, Robert Owen, and New Lanark.

In *Unsere Zeit* (February 15) R. Gottschall discusses the "Modern Historical Drama," with a view to account for the fact that though 90 per cent. of the plays annually published in Germany are historical in subject only one per cent. of those acted are so. He points out that an historical play is not *ipso facto* emancipated from all concern for dramatic exigencies, and his remarks tend to limit the choice of the dramatist to historical incidents which have a natural dramatic unity and completeness, or to the illustration of a striking historical character by the help of more or less imaginary circumstances, which must not, however, be flagrantly at violence with truth.

M. Montégut in the *Revue* (March 1) gives from tradition a characteristic anecdote told of Bonaparte during his stay at Auxonne between 1788 and 91: there was a slight tumult, and the crowd had been vainly summoned to disperse; he ordered the troops to load, and then stepping forward said: "Citoyens, que les honnêtes gens se retirent bien vite; je n'ai ordre de tirer que sur la canaille;" of course the street cleared instantaneously.

We learn from the *Nation* that Mr. Brownson, the representative of independent Roman Catholic thought in America, has begun a new and "last series" of his *Quarterly Review*, which will treat of religion, politics, philosophy, and general literature.

Professor Bernhard ten Brink, whose Chaucer studies have met with due acknowledgment from English scholars, will soon remove from Marburg to his new position in the University of Strassburg. We hear the first volume of his *History of English Literature, coming down to Gascoyne*, is nearly ready for publication.

Dr. C. Th. Heigel writes to the *Allgemeine Zeitung* (March 9, 10) to combat the prevailing impression, explicitly countenanced by Baron Hormayr, that the extracts from the will of Ferdinand I., published by the court of Vienna in 1740 in answer to the challenge of the Elector of Bavaria, were falsified or forged. On the extinction of the Hapsburg male line Charles Albert claimed to succeed, under this will, to all the States governed by the late Emperor, though, like the Elector of Saxony, on his marriage with a daughter of Joseph I. he had renounced all claim to the inheritance in right of his wife, and had subsequently recognized the Pragmatic Sanction on his own account. Authorities then and later were divided on the question whether, according to German usage, the claim of the male representative of an elder female line was better than that of the *Erbtochter* of the last direct male heir. But an examination of the original documents in the Vienna Archives—so liberally opened to students under the direction of H. von Arneth—has convinced Dr. Heigel that Ferdinand's will did really speak of *eheliche Leibeserben*, lawful, not male heirs, as the partizans of the Bavarian claim insinuated.

The *Allgemeine Zeitung* (Feb. 16) publishes some personal recollections of Friedrich Rückert, together with additional extracts from the correspondence between Rückert and Stockmar made use of in Baron Stockmar's memoirs. The latter belong for the most part to 1812-13, the period of Rückert's earliest loves and love-poems, and are characteristic of the intellectual tone of what was then Young Germany. As he approached middle age, Rückert's Oriental studies, like Uhland's mediæval and historical ones, had somewhat the effect of withdrawing him from the leading place he might have claimed amongst contemporary German poets; though the author of *Geharnischte Sonetten* could not well escape the tribute of a little patriotic doggerel in 1863. It appears from these reminiscences that the Persian mysticism naturalized in his verses was a fair representation of his attitude towards graver subjects of speculation, but we are assured that he died a Theist.

In the *Revue des deux Mondes* (Feb. 15), M. Maxime Du Camp reviews the condition of primary, secondary, and higher

education in Paris. In the elementary schools, which have a strong family likeness all the world over, he thinks the substance and methods of teaching all that can be wished, but buildings and playgrounds are urgently wanted. He repeats the complaints so often made of the effect of the *concours général* on the lycæums and private schools, and points to the obvious remedy of making the examination for the *baccalauriat-ès-lettres* a reality. The University education has been ruined, he considers, by politics, the Government not daring to appoint the best professors, because they were probably its enemies, while the actual professors found it easier to draw audiences by a display of liberalism than by serious zeal for tuition. M. Cherbuliez concludes the history of Méta Holdenis, a sentimental pietist adventuress from German Switzerland, with strange blue eyes, who ends as a Protestant deaconess. It is natural to compare her to Becky Sharp; without being as powerfully conceived, she is much more realistically painted, the subtlest point being that it is an indulgence to her to deceive herself by fancying that she is giving way to feelings which all the while are perfectly under control. Even when unmasked she still continues to think herself what it suits her best to seem; she has none of the cynicism of Becky, who never for a moment in her own inmost heart forgets that she is every bit as bad as it pleases the author to call her. Méta's intrigues are very ingeniously invented, but the writer scarcely allows himself time to work them out; as soon as she has begun to do serious mischief, she is baffled by a *coup de théâtre*, which would be more in place upon the stage.

A new tragedy, entitled "*King Vukashin*," has appeared from the pen of the fertile Serb dramatist, M. Ban.

The *Journal officiel de la République française* has recently published a report of M. Dozon, the French consul at Philipopoli, with regard to the genuineness of the popular songs collected among the Bulgarians of Thrace and Macedonia. M. Dozon has himself made a collection, embracing all the varieties of popular Bulgarian poetry, which is now ready for publication.

M. Zubek, the biographer of Komensky (Comenius), is about shortly to publish a complete edition of the works of the celebrated pedagogue. The first volume will contain his didactic works; the second, his philological works; the third, his philosophical and metaphysical.

Art and Archaeology.

Studies in the History of the Renaissance. By Walter H. Pater. Macmillan and Co. 1873.

THERE are two kinds of criticism. The one, which may be called dogmatic, attempts to fix a standard of taste, propriety, and beauty, and judges by rule; the other, which may be called æsthetic, refers its judgments to the sensation of the individual critic, and sets up no other standard. If the former leads to a hard and Pharisaical lack of sympathy, the latter has a tendency to pass into mere intellectual Sybaritism. The æsthetic critic too easily becomes a voluptuary, seeking to stimulate his sensibilities by subtle flavours, instead of discriminating what is valuable from what is worthless for the information of the world. Yet his method is really right, for criticism is not a science, neither is there any absolute definition of beauty. The dogmatic critic is palpably absurd in trying to impose upon the world his peculiar canons of taste. The æsthetic critic, if he has been resolutely careful to train his *αισθησις* by the study of great works, and if he possesses the faculty of explaining and giving a reason for his conclusions, is far more helpful to the cause of general culture. To expect an *objektive Gültigkeit* in matters of criticism is clearly false. It is enough that the critic should be accomplished, sincere, gifted with delicate perceptions, and rational. Mr. Pater professedly belongs to the second class of critics; his book is a masterpiece of the choicest and most delicate æsthetic

criticism. "What is the peculiar sensation, what is the peculiar quality of pleasure, which his work has the property of exciting in us, and which we cannot get elsewhere?" This question, which Mr. Pater asks (p. 40) of Botticelli, strikes the keynote to his critical method. He further explains his purpose in the preface; and each of his eight studies is a wonderfully patient and powerful attempt to do that which is most difficult in criticism, to apprehend for his own mind, and to make manifest to the minds of others, the peculiar *virtue* which gives distinction to the work he has to treat of. In this way the critic becomes himself an artist, a creator. He undertakes at once a higher and more difficult task than the Aristarchus of the schools, who is contented with applying his shallow foot-rule of preconceived opinion. As might be expected, the qualities of Mr. Pater's own temperament strongly modify his perceptions. We find in him (to use his own phrase) "a lover of strange souls." Nor is he wholly free from the intellectual Sybaritism to which the critics of his school, who feed themselves on beautiful things—"en exquis amateurs, en humanistes accomplis"—are liable. Comparatively isolated, indifferent to common tastes and sympathies, careless of maintaining at any cost a vital connection with the universal instincts of humanity, they select what gives them the acutest pleasure, and explain the nature of that pleasure to their readers.

The great distinction of this book is that its author has been completely conscious of what he wished to achieve, and has succeeded in the elaboration of a style perfectly suited to his matter and the temper of his mind. He has studied his prose as carefully as poets study their verses, and has treated criticism as though it were the art of music. Yet he is no mere rhetorician. The penetrative force and subtlety of his intellect are everywhere apparent. There is scarcely a superfluous word or a hasty phrase in the whole volume. Each paragraph, each sentence is saturated with thought; not with that kind of thought which Novalis described as a "dead feeling, a wan, weak life," but with the very substance of the feeling which only becomes thought in order that it may receive expression in words. To do justice to such a style either by quotation or by description is difficult. Yet the following sentences may be extracted as containing in brief something of the peculiar flavour which gives value to the book:—"A certain strangeness, something of the blossoming of the aloe, is, indeed, an element in all true works of art; that they shall excite or surprise us is indispensable" (p. 62). "No one ever expressed more truly than Michel Angelo the notion of inspired sleep, of faces charged with dreams" (p. 59). "The spiritualist is satisfied in seeing the sensuous elements escape from his conceptions; his interest grows, as the dyed garment bleaches in the keener air" (p. 195). "I suppose nothing brings the real air of a Tuscan town so vividly to mind as those pieces of pale blue and white porcelain, by which he is best known, like fragments of the milky sky itself fallen into the cool streets and breaking into the darkened churches" (p. 53). So consummate is Mr. Pater's style that we are surprised to find that he should ever have allowed himself to repeat the same phrase (pp. 64, 66, "but only blank ranges of rock and dim vegetable forms as blank as they"). In like manner he is so patient and perfect in his study of picturesque details that we are almost in spite of ourselves forced to challenge the veracity of his images. For the most part, he will be found as accurate as he is subtle. Yet when he speaks (p. 30) of "that map or system of the world held as a great target or shield in the hands of the grey-headed father of all things, in one of the earlier frescoes of the Campo Santo at Pisa," he has forgotten that the point of this old picture lies in the fact that it is *not* the creative Demurgus, but Christ, in the prime of manhood, who supports

the disc of the universe, with its concentric rings of created beings. Such minute criticism, however, is mere cavilling.

The unity of the book, which is made up for the most part of essays collected from periodicals and polished by their author, consists in this, that each article treats of some phase of the Renaissance through a representative character or work of art. Two are devoted to French literature, and Mr. Pater is particularly happy in his exposition of the theory that the renaissance of modern Europe originated in France. The truth of this theory, which may easily be exaggerated, is that the renaissance was not a sudden and violent explosion of the fifteenth century, but that in all the countries of Europe which possessed the elements of culture—in southern Spain, in Provence, in Frederick the Second's Sicily, in the Paris of Abélard, in the Florence of Boccaccio, and in the Lombardy of the Paterini heretics—the qualities of renaissance striving after liberty were discernible within the middle age itself. Of Mr. Pater's two French studies, that on Du Bellay, in whom he sees "the subtle and delicate sweetness which belong to a refined and comely decadence," is perhaps the more interesting. Like Théophile Gautier and like Baudelaire, Mr. Pater has a sympathetic feeling for the beauty of autumn and decay. He is not even insensible to "what may be called the fascination of corruption." This, which is a very genuine note of his æsthetic temperament, leads him at times, I think, to make mistakes of criticism. A notable instance of this is to be found in his interpretation of Botticelli's Madonnas. They are all painted after one fixed type of beauty—Botticelli, like all true artists, having selected and assimilated for himself from the multitudes of forms just that which represented his peculiar ideal. Mr. Pater imagines that in that sad, languid, sleepy, pallid woman, Botticelli sought to depict one who, "though she holds in her hands the 'Desire of all nations,' is one of those who are neither for God nor for his enemies" . . . one to whom the visit of Gabriel brought an "intolerable honour." I cannot do justice to the eloquence and grace with which this theory is worked out in the essay on Sandro Botticelli. But I must suggest that it ascribes to the painter a far greater amount of sceptical self-consciousness than he was at all likely to have possessed. However we may explain Botticelli's preference for that melancholy type of beauty, we must remember that Lippo Lippi, his master, and Filippino Lippi, his fellow-student, present us with two other varieties of the same type, markedly different, it is true, in sentiment from Botticelli's, but yet like enough to justify the belief that the type itself was the note of a specific school, and not the deliberate invention of an antagonist of the most cherished Catholic tradition. It is far more consistent with Florentine feeling to suppose that in his Madonna's melancholy Botticelli tried to delineate her premonition of the coming sword, and not her weariness in being the mother of the sinless Saviour. A criticism of Michel Angelo, which is marked by the same subtlety and originality, may be questioned in like manner as somewhat over-refined. In the essay on Luca Della Robbia, Mr. Pater defines with much delicacy what are the different methods by which great sculptors have spiritualized their several kinds of work. Passing to Michel Angelo, and noticing the incompleteness of much that he has left, he says: "Well! that incompleteness is Michel Angelo's equivalent for colour in sculpture; it is his way of etherealizing pure form, relieving its hard realism, communicating to it breath, pulsation, the effect of life." This is extremely ingenious, and subjectively it is, perhaps, true: *we* gain by the suggestive ruggedness of much of Michel Angelo's work—in which it seems as if a soul were escaping from the stone. But did Michel Angelo really calculate

this effect? That is what is more than doubtful. When he had the time, the will, the opportunity, he finished with the utmost polish. His "Moses" and his "Night"—the latter of which he illustrated by one of his most splendid poems—are smoothed and rounded and completed in their slightest curves. And to this perfection of finish his work was always approximating. That it often fell short may be explained simply by the facts of his life and the strange qualities of his temperament.

In the essay on "The Poetry of Michel Angelo" Mr. Pater shows the truest sympathy for what has generally been overlooked in this stern master—his sweetness. The analysis of the nature of that sweetness is one of the triumphs of Mr. Pater's criticism. Leonardo da Vinci attracts him less as an artist merely than as a personality of deep and splendid fascination. Pico della Mirandola again receives a separate study, in which we are made to feel with an intensity peculiar to Mr. Pater's style, the charm, as of some melody, which clung about him. The longest essay in the book is on Winckelmann, which, besides containing a very interesting sketch of the man, is full of good criticism of the Greek in contrast with the modern spirit. What is said on p. 195 about the way in which Winckelmann was privileged to approach Greek art is perfect. As the book begins with a preface which sets forth the author's theory of criticism, so it ends with a conclusion in which he expresses his theory of life. Between the cradle and the grave we have but a short breathing space. How are we to use it best by "getting as many pulsations as possible into the given time?" Mr. Pater's answer is that Art is after all the most satisfactory pursuit: "Of this wisdom, the poetic passion, the desire of beauty, the love of art for art's sake has most; for art comes to you professing frankly to give nothing but the highest quality to your moments as they pass, and simply for those moments' sake." J. A. SYMONDS.

ART NOTES.

The death of Gustave Ricard has excited universal regret in France. At Marseilles, where he was born, his portrait (one of his latest works), crowned in gold and veiled in crape, has been placed in the centre of the grande salle of the Cercle Artistique. M. Joseph Autran, of the Académie Française, has published a sonnet to the "Noble artiste aimé, dont nous creusons la tombe," and M. Charles Yriarte in the present number of the *Gazette des Beaux-Arts* contributes an appreciative biographical and critical article. Gustave Ricard was born in 1824, at Marseilles, and went to Paris in 1844 to study in the atelier of Léon Coynet, and from thence in 1847 to Italy, where he passed some time at Rome, Florence, and Venice. It was the great Venetian masters who chiefly attracted him, and their influence was to the last apparent in his painting. In 1850 he exhibited in the Salon a little painting of "Une Bohémienne tenant un chat," which at once brought him into notice, and from that time he contributed regularly to the great French exhibition, sometimes sending as many as eight or nine portraits, until 1859; when for some unknown reason he withdrew entirely from public exhibition. He lived, we are told, a simple retired life in the midst of Paris, and never sought to attract popularity; his work indeed was more calculated to please the critical few than the undiscerning many. His portrait, of which there is a fine etching by M. Le Rat in the *Gazette des Beaux-Arts*, is more like that of a Venetian senator by Titian or Moroni than a modern French artist by himself.

The *Gazette des Beaux-Arts*, the publication of which was delayed from the 1st to the 6th of March on account of the extra number of plates, contains—1. An article by M. René Menard on the important collection of paintings of the French school in the possession of M. Laurent Richard. Several engravings from the pictures in this collection are given; among others a strong and somewhat coarse etching by M. Feyen

Perrin of Delacroix's Médée, of which M. Laurent Richard possesses a reduced copy, and a charming etching by M. Greux after Dupré called La Rivière. We understand that this collection is to be sold at Paris early in April. 2. A notice by Emile Galichon of J.-C. Robinson's *Critical account of the drawing by Michel-Angelo and Raffaello in the University Galleries, Oxford*. 3. An account of the writing and ornamentation of the charters and diplomas in the Musée des Archives Nationales, illustrated with several quaint examples of grotesque Gothic ornament. 4. The biographical account of Gustave Ricard, before mentioned. 5. An article entitled "Un collectionneur de l'an VI.," which makes known a most important collection of pictures that has been hoarded away in the Rue Castiglione, by M. Papin, without any one suspecting its existence. The collection includes paintings of the Italian, the German, the Flemish, and the French schools, but the later Dutch masters are the best represented. The *Gazette* furnishes us with etchings from pictures by Isaac van Ostade, Philip Wouverman, Phil. Debucoart, and Ruysdael in this hitherto unknown collection. 6. M. Alfred Darcel concludes his article on "Le Mouvement Archéologique relatif au moyen âge." 7. In an article entitled, though for what reason does not appear, "From Hugo van der Goes to John Constable," M. Henri Perrier deigns to acknowledge the existence of an English school of painting, and to regret that it is unrepresented in the Louvre. M. Perrier gives a slight and somewhat inaccurate account of several of our English landscapists, and then passes on to some of the least noteworthy of the later Dutch masters. The article is illustrated by a portrait of Canova by Jackson, an etching of a Fishmonger's stall, after Abram van Beyeren, and "Les bords de la Meuse," after Van Goyen. It will be seen that this number of the *Gazette des Beaux-Arts* was well worth waiting for.

An exhibition of the works of the late Léon Vaudoyer, one of the most distinguished architects of the present day, is open for a few weeks at the École des Beaux-Arts. His greatest work, the Cathedral of Marseilles, begun in 1855, was unfortunately left unfinished at his death, but it is hoped that the drawings and plans he has made for it will be sufficient to enable his friend and pupil M. Esperandieu to continue the work in the spirit in which it was begun by the master. Léon Vaudoyer was one of those architects who aspire to create a modern style.

A sale was announced for March 1 of the studies and sketches of Aug. Anastasi, the French artist who, it may be remembered, was struck with blindness in 1870. In the preface to the catalogue there is a short account of Anastasi's life, distinguished alike by its talents and its misfortune. The finished works of the artist's studio were sold about a year ago, and met with successful competition, but at that time, when he was still hoping to regain his sight, Anastasi could not make up his mind to part with his cherished studies and sketches for future paintings. Now, however, all hope is over, and the poor blind painter sells everything. The catalogue, besides a few paintings, contains a list of 400 studies painted from nature, and 200 water-colour drawings.

At a recent sale by Messrs. Sotheby, Wilkinson, and Hodge of ancient and modern engravings, the property of a well-known print-collector, the following high prices were realized:—By Albrecht Dürer, "Adam and Eve," £73; "St. Hubertus," £36; "Melencolia," £31 10s. By Marc Antonio, "Adam and Eve," £59; "Paul Preaching at Athens," £84; "St. Cecilia," £50; "Judgment of Paris," £80; "A Woman Watering a Plant," £94. By Raphael Morghen, "Aurora," £53; and lastly the celebrated print of the "Three Trees," by Rembrandt, £123. At the sale of the Hippisley collection, from whence this impression was derived, it fetched £83.

The annual exhibition of the Cercle de l'Union Artistique in the Place Vendôme is, we are told, crowded every day. This exhibition of the great art club of Paris forms, as it were, the *anti-chambre* to the "Salon," for many French artists allow their pictures to be criticised here before sending them to the greater exhibition of the Champs-Élysées, which does not open

until May. The great attraction of the present collection is a full-length life-size portrait of Madame Rattazzi, by Charles Jalabert, which stands forth from a brilliant scarlet background. It is said to be an excellent likeness as well as a most striking painting. Other works of great merit are—"Sur la Plage," a fine effect of sea and sky, by G. Jundt; "Le Rosario, Souvenir d'Espagne," by Gustave Doré; "Le Passage du Gué," by Broun; and "Laveuses à Medinet en Egypte," by Bonnat.

The March number of the *Portfolio* contains the beginning of a narrative called "The Sylvan Year," by Raoul Dubois. The author tells us in the preface that "whatever Nature may be from the strictly scientific point of view, it is interesting to the artist (whether literary or pictorial) mainly as it is related in ways more or less mysterious to the world of feeling which lies within our own breasts." He has therefore deemed it advisable to "introduce one or two fictitious personages and an element of human interest" into what promises to be a descriptive history of the forests on the banks of the Loire. "The Sylvan Year" is enriched by two splendid etchings, one, a flight of wild geese over a barren moor, by Karl Bodmer, and the other, some trunks of forest trees in weird sunlight, by P. G. Hamerton.

Among Professor Brunn's *Archæologische Miscellen* which appear in the Transactions of the Academy of Science at Munich for November last, we find notice of two monuments which have a special interest for students of ancient art in this country: (1) the so-called Harpy monument discovered by Sir Charles Fellows in 1838 on the acropolis of Xanthus, and now in the Lycian Room of the British Museum, and (2) an archaic figure of Apollo acquired for the national collection about ten years ago from Lord Strangford, and now in the Phigaleian Room. The peculiarly archaic style of its sculpture, in which the elements of an Attic and a provincial school seem to be blended, has obtained for the Harpy monument a place of considerable importance among the remains of ancient art, while the obscurity of the subject which it represents has given rise to a conflicting variety of opinions. As regards the peculiarities of style, Brunn had previously (1870, ii., p. 205) communicated his opinion. His purpose is now with the interpretation of the subject. Curtius, the most recent authority on the matter, had discovered in the egg-shaped bodies of the Harpies, from which the monument derives its name, a profound symbolical manifestation of belief in the immortality of the soul. What suggested this idea was the fact that the Harpies are undoubtedly represented as in the act of carrying off the souls of deceased persons, whether the daughters of Pandareos, as is supposed, or not. And what further lent colour to the theory was the presence of such attributes as the apple and pomegranate, which were associated in the Greek mind with thoughts of a life in the lower world. On the other hand, Brunn points out that the primary signification both of the pomegranate and apple was that of a symbol of marriage, and that it was only through their occurrence as symbols of the marriage of Hades and Persephone that they came to have some indirect reference to after life. Of the other attributes which occur on the monument, the cow with its sucking calf, the egg, and the dove of Aphrodite are obvious emblems of family life. The same must be said of the three stages of life represented by the figures of a boy, a youth, and a man. Starting, therefore, with the idea that the artist's design was simply to indicate the ties of family life which had been broken by the death of the person or persons whom he was employed to commemorate, the subject admits of easy explanation. It is unusual, no doubt, to find in the sepulchral art of Greece such an obvious representation of death as that of Harpies carrying off souls, the mere existence of a *stèle* or a tomb being sufficient evidence of that event. It should, however, be borne in mind that we have here to do with the work of a people not purely Greek, and distinguished above all, as far as we know, for the veneration of their dead. That people accustomed to the contemplation of death, as the Lycians appear to have been, may have regarded such representations of it without horror, is not unlikely. That they had arrived at a belief in the immortality of the soul at the early period to which this monument is assigned, is highly improbable.

With regard to the Strangford Apollo, Brunn has found from a detailed comparison of it with the Aeginetan statues in Munich

that it belongs to the same school, the differences being only such as would be expected among the individual artists attached to one school, and, indeed, not much greater than those which have been observed between the sculptures of the western and those of the eastern pediments of the temple at Aegina. The expression of face in the Strangford Apollo and the position of the eyes and mouth are more pleasant than in the Aeginetan figures, which never fails to produce a feeling of disappointment when we turn from the finely rendered anatomy of the body to the petrified smile of the face.

An exhibition of the works of the late Edward Magnus has recently been opened at Berlin. There is a notice of it in a recent number of *Im Neuen Reich*. The critic considers that Magnus's chief significance for the present generation lies in the peculiar conception of womanhood in his paintings.

Now that the Cesnola collection of antiquities from Cyprus has left this country for good, and the air has again become clear of the thunders of our watchful monitors in the press, it is consoling to find that the opportunity was not also lost of securing photographs of such of the objects as in our present state of knowledge might be deemed the most important for purposes of historical study. A series of photographs from objects selected for this purpose has been published under the title of *The Antiquities discovered in Cyprus by General di Cesnola, with an Introduction by Sidney Colvin, M.A.* (London: Mansell and Co. 1873.) In the introduction Mr. Colvin has succeeded admirably in placing in a vivid light the very scant knowledge which we as yet possess in reference to that very obscure problem, the relationship of early Greek sculpture to the contemporary art of Assyria and Egypt, a problem upon which the time appears not to have arrived yet for an influx of new light. At all events the hopes recently raised to a high pitch by discoveries in Cyprus seem to have little promise of being speedily realized. Further research may do a great deal, especially if attended with the discovery of sculptures in the more precious materials in which those artists loved to work, by whom the craft in Cyprus is assumed to have been influenced. Again, before we can be satisfied of a genuine Greek influence having been exercised on the art of that island, it will be necessary to produce, instead of a multitude of heads, at least a few bodies in which a sincere effort has been made to reproduce the human form with some degree of truth to nature. For Greek sculpture, it would seem, had not itself shaken off Asiatic influence, and certainly had not risen to the rank of a fine art, until it took to statuary and the close study of the human form. That which is most striking in the remains of Greek sculpture, the scarcity of heads as compared with torsos, is exactly inverted in the case of Cyprian remains. Meantime we must be thankful, even though these photographs are not the best that could be produced, for the service which has been rendered by preserving the typical objects of the Cesnola collection in a manner with which serious students of ancient art can have no reason to complain.

In a letter to the *Athenæum*, of March 8th, Mr. Wood communicates an account of his excavations at Ephesus, together with a ground plan of the Temple of Diana, the accuracy of which appears for the most part to be vouched for by remains found *in situ*. Short as it is, the letter conveys a striking picture of the difficulties and hardships which beset enterprise of this kind in a country where the population is enervated by marsh fever and degraded by superstition. The marvel is that even the ambition of finding one of the lost wonders of the ancient world should have sustained Mr. Wood through these years of incessant toil and vexation. As an architect he would also of course have derived a powerful impulse from the fact that the site of the Temple of Diana, if anywhere, was the spot on which some of the most important questions of Ionic architecture might be finally determined. The temple is now found to have been octastyle, that is, with a row of eight columns in front, not decastyle, as had sometimes been supposed, for the sake of working in Pliny's measurement of the width (220 feet) without requiring what was obviously much too large an intercolumniation. And yet Pliny's measurement seems to be correct, the fact being that it applies very well to the lowermost step of the raised platform on which the temple stood, and not to the uppermost step. This lowermost step measures 238 feet

34 inches English. Mr. Wood is not yet prepared to verify the dimension of length given by Pliny. With regard to the number of external columns, Pliny is again found to have been accurate in reckoning them at one hundred. Of these thirty-six were sculptured (*columnae coelatae*). Having found important remains of sculptured columns in front, Mr. Wood proposes to account for the thirty-six by placing two rows of eight each at either end, though as yet no trace of sculptured drums has been found in the rear, and one at each of the four *antae*. It still remains a puzzle, however, whether we are to interpret Pliny's expression as meaning that the columns were sculptured all the way up, or whether only a portion at the base was decorated with figures in relief. From Mr. Wood's letter in the *Times* (25th February) they would appear to have been sculptured to the distance of at least three drums up from the base. Each drum being of the height of the figures upon it, that would give three tiers of figures. If this be so, it is singular that the bronze medallion in the Bibliothèque in Paris, which presents a view of the front of the temple, should only show one row of figures on the columns. As to Pliny's other statement that twenty-seven of the columns were the gift of kings, the only evidence as yet found consists of some fragments of base mouldings, on which large finely-cut letters occur, which are so far intelligible that they must be parts of proper names, and possibly the names of the donors. The excavations now employ a large force of workmen, and it is to be hoped that before the unhealthy season sets in the entire area of the temple will have been explored. When this is done it would be advisable to clear away the soil to some distance round the outside of the platform to see whether or not the sculptures of the upper part of the building, if there were any, may not have been thrown outwards by the fall.

During the summer of 1874 a very interesting exhibition will take place in Russia. The venerable city of Kief has been chosen as the seat of the next triennial meeting of the Russian Archæological Congress, and the President of the Moscow Archæological Society, Count Oubarof, has issued circulars calling the attention of antiquarians to the exhibition which will then and there be held. All kinds of objects in any way illustrative of Slavonic archæology will be gladly received for exhibition, and it is hoped that a most valuable and instructive collection will be brought together. The period which it is chiefly intended to illustrate is that which lies "between the seventh or ninth century and the end of the fourteenth," that is to say:—For Russia, up to the death of Dmitry Donskoi (1389); for Bohemia, Moravia, and Silesia, to the death of Wenceslas IV. (1419); for Servia, to the battle of Kasof (1389); for Poland, to the death of Louis of Hungary (1382); for Galicia, to the death of Casimir III. (1370); for Pomerania, to the death of Wratisslas VII. (1457); for Dalmatia, Bulgaria, Lusatia, Hungary, Croatia, Roumania, &c., to the end of the 14th century.

The "Wagner Society" repeated the scheme of their first concert at St. James's Hall, on March 6th, as announced. The hall was densely crowded, and the enthusiasm of the audience even greater than the first time, which shows how decided a mark the works of Wagner have made in this country, as they had to appeal this time not to a narrow circle of special friends, but to a miscellaneous gathering. The engagements of Herr Diener on the continent had made his stay for this concert impossible. In consequence his place as vocalist had been taken by Mdle. Girardi and Signor Garcia. The former sang "Elizabeth's Prayer" from Tannhäuser and "Elsa's Song" from Lohengrin with good taste and a fresh voice. Signor Garcia gave but little satisfaction in Wolfram's "Romance" from Tannhäuser, while two French songs written in Wagner's earlier style seemed to be more congenial to his powers of rendering. The orchestra followed their excellent leader Mr. Dannreuther with unabated enthusiasm and bravura.

Mr. Walter Bache's ninth annual concert took place on February 28th. The most interesting features were two new works by Franz Liszt, the introduction of whose compositions into this country is exclusively owing to the meritorious zeal of his distinguished pupil. They were Psalm xliii., and the "Chorus of Reapers" from Herder's "Prometheus." The former

work is an elaborate setting of the biblical text for tenor solo, chorus and orchestra, in which the style of contemplative repose which is generally thought to befit the musical rendering of religious subjects is changed for the most modern expression of personal feeling. Since Beethoven's "Missa solemnis," the former style would indeed seem, to say the least, antiquated, and we can only give our fullest consent to Liszt's attempt to individualize the character of the struggling and despairing psalmist in the most dramatic manner. The effect of the work depends in consequence to a great extent on the rendering of the solo part, and in the qualities required for this most difficult task Mr. Henry Guy was entirely deficient. His agreeable but not very strong tenor was almost crushed by the pressure of Liszt's passion combined with a full-scored orchestral accompaniment. Chorus and orchestra, conducted by Mr. Bache, were excellent both in the surmounting of difficulties of counterpoint and in the tenderness of the melodious passages. The "Chorus of Reapers" is a musical idyll, full of delicious melody and orchestral colouring, reminding one of Beethoven's "Pastoral symphony" with its songs of nightingale and quail. The public were charmed and surprised by this mild form of the "music of the future," and demanded the chorus *da capo*. Wagner's "Huldigung Marsch," a piece full of broad melody and festive brilliancy, but of a strongly occasional type and only partly scored by the composer himself, was the third novelty of the evening. It remains to add a few words about Mr. Bache's playing of Schumann's concerto in A. (Op. 54). We have repeatedly pointed out the great technical skill, combined with a rare perception of poetical intentions, which advantageously characterize Mr. Bache's style. It required all these qualities to render successfully the plaintive passion of the first part, and to surmount the enormous difficulties of the brilliant finale in the way, which elicited the most enthusiastic applause of the audience. This piece, and the choral march from Beethoven's "Ruins of Athens," were conducted by Mr. Manns.

New Publications.

- GRIMM, H. Zur Abwehr gegen Herrn Prof. Dr. A. Springer's Raphael-Studien. Berlin: Dümmler.
- HERACLITUS. Von den Farben und Künsten der Römer. Originaltext u. Uebersetzung, mit Einleitung, Noten u. Excursen versehen von A. Ilg. (Quellenschriften für Kunstgeschichte u. Kunsttechnik des Mittelalters u. der Renaissance.) iv. Bdchen. Wien: Braumüller.
- HIPLER, F. Literaturgeschichte des Bisthums Ermland. Leipzig: Peter.
- HIPLER, F. Spicilegium Copernicanum. Leipzig: Peter.
- HIRSCHE, K. Prolegomena zu einer neuen Ausgabe der *Imitatio Xti*. (Endeavour to establish authorship.) Berlin: Lüderitz.
- KAUFMANN, J. Traité de la langue du poète Ecossais William Dunbar, précédé d'une esquisse de sa vie et de ses poèmes, et d'un choix de ses poésies. Bonn: Weber.
- MASSALOFF, N. Les Rembrandt de l'Ermitage Imperial de Saint Petersbourg. 40 planches gravées à l'Eau Forte. Leipzig: Drugulin.
- PATER, W. H. Studies in the History of the Renaissance. Macmillan.
- PRINZESSIN AMALIE, Herzogin zu Sachsen, Dramatische Werke: im Auftrage S.M. des Königs Johann von Sachsen, aus dem Nachlasse vervollständigt u. hrsg. v. R. Waldmüller. 1 Bd. Leipzig: Tauchnitz.
- SAND, GEORGE. Impressions et Souvenirs.

Physical Science.

- (1.) *Voyage en Abyssinie*. Exécuté de 1862 à 1864. Par Guillaume Lejean. Text and atlas folio. Paris: L. Hachette et Cie. 1872.
- (2.) *Guillaume Lejean et ses Voyages*. Par Richard Cortambert. Extrait du Bulletin de la Société de Géographie. Paris: Ch. Delagrave et Cie. 1872.

FROM M. Cortambert's very pleasant sketch of the life of the well-known French traveller, whose posthumous work on Abyssinia is now before us, we learn that Guillaume Lejean was the son of a humble Breton farmer, of Plouégat-Guerrand, in Finistère. Distinguished as a youth by his intelligence; love of work, and retentive memory, he was taken in hand by the priests of the College of St. Pol de Léon, who hoped one day to see him take a high place in their brotherhood. But his independent spirit rebelled against the monotonous

calm of the ecclesiastical profession, and chose rather the uncertainties of a free life. Appointed secretary to the Sous-Préfecture of Morlaix at an early age, and availing himself of his position to gratify his love of historical research, he found in the archives of the town the materials for a "Communal History of Finisterre," which he published in his twenty-second year, and, later, for a work on "Brittany and its Historians." In 1847 he came to Paris, where he maintained himself for a time as a journalist. Ancient geography, closely allied as it is to history, became a favourite study: Lejean was specially attracted towards that of Turkey in Europe, which offered striking comparisons of a bygone age with a story in process of formation; a great past to examine, and a strangely curious present period of nationalities the most diverse and tendencies the most opposite submitting to the rule of a handful of Asiatic Mohammedans, who for centuries have been, as it were, camped in Europe. It was now his good fortune, favoured by recommendations from several distinguished men, to obtain a mission from the Institute to travel in the East, and soon Lejean was traversing on foot the mountains of Albania, Bulgaria, the Roumanian Principalities, Herzegovina, and Montenegro, noting alike the diversified topography and ethnology of those countries. This tour enabled him to prepare a monograph on the peoples of Turkey, accompanied by a map, which was published as one of the supplementary parts of *Petermann's Mittheilungen*, and is still perhaps the most important work on the ethnography of that part of Europe. A few years after his return to Paris from this undertaking he formed the project of ascending the Nile as far as its sources, and, favoured by the support of some one in high station, took his departure for Africa. To avoid a tedious passage up the Nile from Egypt he chose the route from Suakin on the Red Sea across the lower Akbara to Khartum, at the confluence of the Blue and White Niles. After some months spent at this point he ascended the White Nile, but was not successful in attaining any higher place than the neighbourhood of Gondokoro, where a succession of fevers and the hostility of the native tribes compelled a retreat, leaving it to Speke, Grant, and Baker to solve the enigma of the upper course of the mysterious river. Two years later, however, we find Lejean again in the basin of the Nile, this time charged with a diplomatic mission to King Theodore, who, believing himself to be the instrument in the hands of Providence by whom the diverse factions of Abyssinia should be forced into unity, had claimed the recognition of the sovereigns of Europe. The geography of this most interesting journey in the Abyssinian Highland, and the narrative of the stirring events through which it led until Lejean's fortunate escape from the hands of the tyrant, form the subject of his special work, which we shall notice further on. In 1864, having accepted a mission to Persia and Cashmere, he recrossed the scene of his former labours in Turkey, and journeyed thence on horseback through Asia Minor, visiting Mount Argæus and examining the ruins of Ctesiphon and Seleucia on his way to the Persian Gulf and India. Scarcely had he come back from this magnificent tour, when, still urged by the spirit of travel, he once more turned to his chosen field of labour in European Turkey, this time to begin an undertaking beyond his powers—the topographical survey of the whole country. Each year he departed for a surveying campaign of seven to eight months, returning to Paris only to arrange the notes which he had collected, and then to start afresh.

Worn out with incessant labour, and suffering much from the calamities which had overtaken France, whither he returned on the outbreak of the war, Lejean was carried off, in February, 1871, by fever, in the 47th year of his age, when residing at his birth-place in Brittany.

Lejean's narrative of his journey in Abyssinia was designed chiefly as a descriptive companion to the atlas of maps which show the topography of his lines of route, and in this respect it has a high geographical and ethnographic value. But it also possesses a more general interest as a graphic recital of the events in the career of the strange King Theodore, which formed a middle period between his first successes and his ultimate downfall and tragic end. The traveller made his way into Abyssinia from the western side, going in an almost direct line from Khartum, by Matamma and the northern side of Lake Tsana, to the hill camp of Debra Tabor in the centre of Abyssinia, then the headquarters of King Theodore. His first interview with the king took place at the neighbouring village of Gafat, which Theodore had given over to the Europeans then in his service, and whither he had gone to witness the testing of a mortar which had just been completed. At the audience granted next day at Debra Tabor, Theodore remarked with suspicion that the letters from the French Government were signed "Thouvenel," and not "Napoleon." But at first all went well, and Lejean was able by frequent excursions in the vicinity of the camp to map out accurately a large portion of the central province. War having been declared against the rebellious chief of the southern province of Godjam, Lejean, with other Europeans from Gafat, were required to follow the movements of Theodore's army in a raid, carrying fire and sword into the insurgent country as far as the centre of the peninsula of mountains round which the Abai flows after leaving the Lake Tsana. From this country Theodore's army, demoralized rather than beaten, was compelled to retreat. The campaign over, Lejean found orders awaiting him to repair to the port of Massowa, on the Red Sea, and he imprudently demanded an audience of the king. Exasperated by defeat, and learning that the Egyptians were about to invade his northern provinces, Theodore, in place of granting Lejean the desired leave to depart, ordered him to be imprisoned, and heavily chained. A new humour of Theodore released him from captivity, and gave him permission, as a prisoner on parole, to go whither he would in the central part of the kingdom. Taking advantage of this liberty, Lejean visited the eastern and southern shores of Lake Tsana, and journeyed thence northward to Gondar, the capital city, before returning to Gafat. Political events now led Theodore to move with his army to Gondar, and in the September of 1863 all the Europeans of Gafat had orders to repair thither. They found Gondar in a state of great agitation; the king inhabited its palace, and his army was encamped on the heights to westward; he was waiting for the English Consul, Cameron, and a messenger, whom he had sent to Paris to bring a reply from the French Government. At length this messenger arrived, and the letter was opened at an audience, all the Europeans being present; but the missive lacked the imperial seal, and Theodore, to defy the French Government, threw the letter at his feet, and pronounced sentence of Lejean's expulsion from Abyssinia. Never was a command more acceptable or more fortunate. Consul Cameron had laughingly said to Lejean on meeting, "Well, colleague, are the king's chains heavy?" little thinking that in a few weeks he himself was to prove their weight. The traveller's route to northward lay across the Lamalmon, a grassy and undulating slope on the southern side, but on the north an abrupt and terrible line of cliffs; then by Axum and Adowa to the coast. His escape was a narrow one, but it was not till later that Lejean knew that Theodore in a changed mood had sent men to follow and bring him back to Gondar, saying, "The man has escaped me, and I do not yet know whether he is a friend or an enemy."

Although Lejean's routes rarely if at any point touch upon new ground, since the whole country which he traversed had been described either by Bruce, Ruppell, D'Abbadie, Beke, or Heuglin in former years, they yet form a very valuable supplement to the work of these travellers, and must henceforward be considered an important geographical "material" for the delineation of the eastern side of the Abyssinian plateau. The maps of his atlas, drawn for the most part on the large scale of three miles to an inch, bear evidence of a minute record of every detail and accident of the ground. In laying down these routes, however, Lejean has depended entirely upon the astronomical positions determined by former travellers; if he had been able to make such observations independently from point to point, the value of his work would have been more than doubled. "Lejean saw rather the inspiration than the true science of topography."

A sketch of the history of Abyssinia before the sixteenth century is appended to the descriptive part of M. Lejean's work, and is an attempt to critically adjust the information given by native chronicles with the known history of the surrounding countries at that period. It traces the progress of the country from the earliest dawn of civilization down to the time when it was first visited by Europeans, and displays a great amount of careful research.

We are glad to observe in a note on the title page of the descriptive volume that M. Lejean's correspondence and manuscripts have been collected and arranged, and that the publication of his geographical and historical works is to be continued. His materials for the geography of European Turkey must be especially rich and valuable.

KEITH JOHNSTON.

Notes on Scientific Work.

Geography.

Western Mongolia.—The route map, made during the Russian trade expedition of 1870 under Matusovski and Pavlinov in Western Mongolia, a copy of which is published in *Petermann's Mittheilungen*, gives a fresh proof of the incessant activity of Russia in extending its scientific knowledge of and commercial relations with the districts far south of its present Asiatic possessions. The track followed passes round the margin of the chief basin of continental drainage in Western Mongolia, which includes the lakes Ubsa and Kirgis-nor as its central points. From the outpost of Suok, near the boundary of the Siberian government of Tomsk, the travellers went nearly due east by Kobdo to Ullia-sutai; then turning to the north-west they crossed the range of the Tannu-ola, and reached the Russian territory again at Ussa, on a small tributary of the Yenisei in the government of Yeniseisk. The whole distance traversed is about 700 miles. We may expect to have important and fresh information on this region from the English traveller Mr. Ney Elias, who has just returned to England after a splendid tour across Mongolia from the Chinese side.

South Africa.—Letters received by Dr. Petermann from African merchants, and published in the *Mittheilungen*, communicate the important information that Portuguese traffic on the Zambezi has again sprung into activity, and encourage the hope of a speedy opening up of this almost unknown basin. Zumbo, a station on the north side of the Zambezi, about 450 miles in a direct line from the mouth of the river, was a complete ruin when Dr. Livingstone passed it in 1856. It was again occupied by the Portuguese in 1861, and has become the centre of a brisk traffic with the districts watered by the northern tributary rivers Aruango and Cafue. Other factories have since been founded higher up the river as far as the mouth of the Cafue. On the other hand the hold which the Portuguese retain of their possessions in Western Africa appears to have been much loosened of late years; their authority is said to have almost disappeared on the lower Congo, whilst southward the whole district of the Dembo tribes in central Angola is in open revolt against Portuguese rule. The only route that now appears to be open to an expedition going inland from that side is that which has already been twice traversed by Dr. Livingstone, as well as by other travellers, from Loanda eastward to Cassange on the Quango river, which is still under Portuguese dominion. It seems probable, under these circumstances, that the English expedition of the Lieutenants

Grandy, now perhaps on its way inland from Loanda, may have been compelled to take this course to gain the interior instead of that projected at leaving, which lay to north-east from the starting point on the coast towards the Congo.

New Guinea.—The advantages to be derived from an English occupation or colonization, from the side of Australia, of that unclaimed portion of the vast and rich island of New Guinea which lies east of the 141st meridian of longitude, the recognized Dutch boundary, seem again to demand notice. A pamphlet recently published at Rome by Signor Guido Cora,* the editor of a new geographical publication named the *Cosmos*, has a special interest at this time. It describes the Italian voyage of exploration to New Guinea under Signor Odoardo Beccari, now in progress, and gives a sketch of our present knowledge of the geography of the chief island and its surrounding islets, with useful references to the works of the voyagers on whom we are dependent for information respecting it, from the time of its discovery by the Portuguese navigator Don José de Menezes in 1526. The scheme of exploring the eastern part of New Guinea for the purposes of colonization was first projected by the English in 1866. In 1867 an attempt was made at Sydney to organize a company to colonize the island, but the plan failed chiefly through the opposition raised by the Rev. Tennison Wood in various articles published at that time in the *Australasian* journal of Melbourne. The subject was again taken up in 1869, when a proposal for a new exploration of New Guinea, on behalf of the German colonists in the Antipodes, was made by Dr. Petermann in his *Mittheilungen*. In the following year the Russian scientific voyage of Nicolaus Mieluchomacay was announced, and the exploration of New Guinea formed a chief part of its programme.† At this time also Sir Charles Nicholson, in a paper read before the Royal Geographical Society, and in 1871 by articles in the *Australasian*, drew public attention to New Guinea as a field for exploration and trade. Dutch jealousies having been awakened by these proposals, despatches were sent to the Governor-General of the colonies at Batavia, ordering him to send a vessel to take formal possession of the eastern coasts of the island. In consequence of this mandate the steamship "Dasson" was sent in 1871. The ship visited Macleure Bay, then Dorey on the west side of Geelvink Bay, and reached as far as Humboldt Bay, in 140° east longitude, on the north coast of New Guinea. The expedition was planned to visit the whole of the north coast, but a dangerous malady common on these coasts, and known as Beri-Beri, broke out among the crew, and compelled the commander to return without having accomplished his mission. Torres Strait, where it separates the northmost settlement of Queensland at Port Simpson from the south shore of New Guinea, is scarcely sixty miles in width, and is one of the chief gateways to the Pacific.

Zoology.

Spontaneous division in Star-fishes.—Mr. C. Lütken, of Copenhagen, so well known for his important researches on the Natural History of certain groups of the Echinoderms, has recently laid before the Royal Academy of Copenhagen the results of some very interesting and valuable investigations on the spontaneous division of the star-fishes and brittle-stars. Professor Verrill has recently described a new genus of brittle-star, *Ophiothela*, all the known species of which possess a number of arms greater or less than five, generally six, and in some few instances three or two; very rarely indeed does the normal number of five make its appearance. Lütken describes a new species of this genus, *O. isidicola*, on a certain number of specimens of which he finds six nearly equal arms, but in the majority of these specimens there is a marked difference between the three arms on one side of the body and the three arms on the other; in another set the difference is still more marked, the one set of three arms being quite small and the other of the ordinary size. In others, again, this difference is extended to the disk itself, and it looks as if it had been cut in two by a knife. In all these cases there can be little doubt that these appearances result from a primary division and then a regeneration of the parts that had been divided off. It becomes an interesting question how often such division could take place in any individual; without being able to pronounce any positive opinion on this point, Lütken inclines to the belief that up to a certain age it can be repeated several times. Allowing that the faculty of regeneration is very great among the ophiroids (a disk of an ophiura deprived of all its arms will sometimes under favourable circumstances renew them all), still the phenomenon witnessed in *ophiethela* differs from a mere casual renewal of lost parts of an accidental lesion; there is a regularity and symmetry about it which certainly points to a true natural spontaneous division having for its object the multiplication of the individual. It must not be forgotten, moreover, that Profs. Steenstrup and Sars have observed the same phenomena in certain small ophiroids with six arms, especially among

* *Spedizione Italiana alla Nuova Guinea*; Cenni di Guido Cora. Roma: Civelli.

† An interesting extract from a letter written from the coast of New Guinea by M. Nazimoff, commander of the "Vitia," the chief vessel of the Russian expedition, is communicated to the *Bulletin de la Société de Géographie* for January, by M. Elisée Reclus.

species of the genus *Ophiactis* that live intertwined among corals and sponges, nor that the truth of their observations has been confirmed by Lütken himself. In one or two species of another genus, *Ophiocoma* (*O. pumila*), the same thing occurs; in these instances it becomes clearly apparent that in young individuals only this agamic form of reproduction takes place, and that with the adult forms the results of the division are truly sexual. Similar phenomena have been remarked in certain *Asteridae*, notably in *Asterias problema* Stps., and in some allied species described by Verrill, as well as in *Linckia orithopus* and *Ophidiaster cribrarius*. Lütken is of opinion that though there are many cases where the spontaneous division is merely gemmation more or less disguised, there are likewise many instances in which it is, so to speak, simple division and nothing else. In the case of the ophiuroids and asteroids he inclines to think it a normal form of multiplication, which takes the place of gemmation. It would have a near relationship to the power of regeneration on the one hand, and to that of gemmation on the other; and while it may not always be possible to clearly define the exact limits of these "powers," it is convenient to preserve to "Schizogony" an independent place among the different forms of agamic multiplication. The classifying of the phenomena above alluded to as occurring in the ophiuroids and asterids in the category of "Schizogony," conclusively indicates, in short, that there is in this spontaneous division something altogether different from gemmation. The following general propositions are laid down by Lütken:—1. The most energetic manifestation of the faculty of regeneration in animals is the power of divisibility; 2. In certain forms of Radiata, in which the faculty of regeneration is very highly developed, spontaneous division takes place only, as in aphiuroids and asteroids, or together with gemmation as in Actinia; 3. Actual spontaneous division or Schizogony in the Actinia, Medusa asteroids and ophiuroids, which must not be confounded with the disguised form of gemmation met with in Infusoria and certain hetopods, may be regarded as a peculiar form of agamic reproduction, such as Blastogony, Sporogony, and Parthenogony.

Researches on the Anatomy of the Limuli.—M. A. Milne-Edwards, who has studied more particularly the circulatory and nervous systems of the king-crabs, holds the following views regarding the affinities of these animals:—The Limuli differ much less from the scorpions than from the crustaceans proper that form a portion of the recent fauna; and in a natural system they cannot be associated in the same class with the latter animals. Nor, on the other hand, can they be referred to the arachnids, from which they differ not only by their mode of respiration, but also by their compound eyes, absence of frontal appendages, continuous prolongation of the ventral appendicular series on the adjacent portion of the abdomen, and by several other peculiarities of organization. They differ also from all the other articulate animals in the arrangement of the circulatory system; and consequently, in spite of the small number of species in this group, they must be regarded as a distinct class intermediate between Crustacea and Arachnida. In former geological epochs the type from which the king-crabs are derived was represented by animals the general form of which approached still more that of the scorpions, for instance, by the gigantic *Pterygotus* and *Eurypterus*; and it has been well demonstrated by Mr. H. Woodward that all these animals form a natural group for which the name of *Merostomata* may be retained; but, in the author's opinion, they should not be confounded with the crustaceans, as is commonly done. The *Merostomata* were contemporaneous with the trilobites; and it would appear that there exist not only points of very great resemblance between these two groups, but also intermediate forms, by which a passage from one to the other is established. Therefore, some authors have thought proper to unite them under a common name; but this appears to M. Milne-Edwards to be at least premature, as it is impossible to pronounce legitimately a view on this point before we have a fuller knowledge of the appendicular system of the trilobites; and the author considers it to be very probable that the trilobites differ from the crustaceans proper as much as the *Merostomata* do, and that they should likewise form a distinct class. (*Annales des Sciences Naturelles*. Ser. 5, Art. 4, pp. 67, with 16 plates.) (We refer our readers for articles on the same subject to Vol. iii. of the *Academy*, viz., to one by Van Beneden, p. 30, and to another by Prof. Owen, p. 73.)

Harvesting Ants and Trap-door Spiders.—Notes and Observations on their habits and dwellings. By J. Traherné Moggridge. 1873. This is one of those few admirable little books the contents of which are as attractive to the general reader as interesting to the zoologist, on account of the originality of investigation. As indicated by the title, the book is divided into two parts. In the first part the author, whose observations were made at Mentone, shows that the accounts of the ancients, discredited by modern naturalists, of ants collecting and storing grain and other seeds for food, are strictly true with regard to certain species of southern Europe. It is singular that one of these species is an ant very common in central Europe (*Atta structor*), the habits of which have been studied by numerous observers, but which has never been seen to gather seeds of plants. None of the seeds found in their granaries germinate whilst they remain there, but they produce

vigorous plants when removed and sown in a proper locality. In the second part Mr. Moggridge describes the trap-door spiders and their various kinds of nests as observed by him at Mentone. Besides the ordinary kind, the author has discovered another with two doors, one of which is lower down the tube, and a third in which the spider constructs a branch tube opening at an acute angle into the main tube, and likewise closed by a hinged door. The illustrations with which the book is embellished are from the author's own hands, and are executed with great skill and neatness. We understand that Mr. Moggridge has deposited specimens of the animals and their nests in the British Museum and that they are exhibited in one of the public galleries.

The University Press of Cambridge, Mass., has just issued the *Illustrated Catalogue of the Museum of Comparative Zoology at Harvard College*. No. VII. *Revision of the Echini*. By Alexander Agassiz. Parts I. and II. The author of this work has evidently made himself thoroughly acquainted with the collections of Klein, Lamarck, Gray, and others. The preliminary part on nomenclature is especially valuable, but some readers will desire that in the preparation of this catalogue less attention had been devoted to nomenclature, and more to the description of the actual characters of specimens. It is illustrated by a number of maps, showing the areas of species, and forty-nine excellent plates, some lithographic drawings, and some autotype representations of American specimens.

It is with extreme regret that we have to announce the death of Mr. Julius Brencley, of Maidstone, at the comparatively early age of fifty-six years. His love for adventure, and a deep interest for ethnographical and natural history pursuits induced him to commence in the year 1849 a series of travels, which may be said to have only terminated in 1867. He went first to North America, which he traversed in every direction, then to the Sandwich Islands, revisited North America, whence he turned southwards to follow the tract of the Andes as far as Chili. After a short excursion to Algeria and Morocco, Mr. Brencley started for a second long journey to the East, crossing India to the borders of Thibet, visiting China, Japan, Australia, and New Zealand. In 1865 he accompanied Commodore Sir W. Wiseman in H.M. ship "Curaçoa" in a cruise through the waters of the South Pacific; and it is an account of this part of his travels, and a description of the collections made by him on that occasion, which he intended to give to the public in a work that has been the employment and recreation of the last few years of his life, and which, at the time of his death, was ready for publication. From this last journey he returned home through China, Mongolia, and Siberia. The vast collections illustrating natural history and ethnography which he formed have been deposited by him in the British and Maidstone Museums. The latter institution was an object of his constant solicitude, and the munificence with which he embellished and enriched it for the benefit of his native town has not been surpassed in the annals of any provincial museum.

Chemistry.

New Vesuvian Minerals.—Scacchi has published a preliminary notice (*Rendiconto Accad. Sci. fis. e mat. di Napoli*, Fasc. 10, 1872) on some new minerals occurring in the lava and bombs of the eruption in April last year. Red deliquescent orthorhombic crystals were very often met with, of erythrosiderite, $4 \text{ KCl}, \text{Fe}_2 \text{Cl}_6, 2 \text{H}_2\text{O}$. A red sublimation, associated with sal-ammoniac, on the lava of S. Sebastiano proved to be kremersite, $2 \text{H}_4 \text{N}, \text{Cl}, 2 \text{KCl}, \text{Fe}_2 \text{Cl}_6, 3 \text{H}_2\text{O}$. Chlorocalcite was found on a large bomb which had been carried by the lava current as far as Massa di Somma; it consists of very deliquescent somewhat transparent and often violet-tinged crystals exhibiting the faces of the cube, octahedron and rhombic dodecahedron. They contain 58.76 per cent. of calcium chloride, the remainder being made up of the chlorides of potassium, sodium and manganese. Calcium chloride and manganese chloride therefore are isomorphous with the chlorides of the alkaline metals. Hydrofluoric acid has again been detected among the emanations of the volcano, and the slag of the fumaroles when placed over potassium carbonate under glass covers corrodes the glass and converts the carbonate into a mixture of chloride and fluoride. Cupromagnesite, $(\text{Cu Mg}) \text{SO}_4, 7 \text{H}_2\text{O}$, occurs in thin bluish-green crusts. When recrystallized from water it yields monoclinic crystals isomorphous with ferrous sulphate and containing seven equivalents of water. The crystals of sal-ammoniac of this eruption, besides exhibiting faces of the cube, octahedron, rhombic dodecahedron and leucitohedron, has been met with in the form having forty-eight faces (321). The yellow colour of some of the crystals is attributed to the presence of a basic chloride of iron.—Scacchi found lava in the shape of green transparent pliant threads, in which little rounded masses were entangled, and resembling in every respect the Pélé's Hair of Mauna Loa. Rammelsberg has analyzed (*Ber. Deut. Geol. Gesell. Berlin*, xxiv., 3 Heft) the ashes which fell at La Cercola, and finds they have the same composition as the lava. He directs attention, "als Curiosum," to a paper read before the Chemical Section of the British Association at Brighton last year by G. Gladstone, in which it is asserted that this dust consists of magnetite and quartz, and that by treatment with acid a residue of pure quartz is obtained.

Rammelsberg has found that nearly forty per cent. of the ash enters into the composition of neither of these minerals, and that forty-five per cent. of the insoluble portion is not silica but oxides of metals.

The Refractive Powers and Boiling Points of the Sulphur Derivatives of Carbonic Ether.—E. Wiedemann (*Four. prakt. Chem.*, 1872, No. 19 and 20, 453) has determined the refractive indices of the following derivatives of carbonic ether, (C H₂), CO₂, formed by the replacement of one, two or three atoms of the oxygen of that substance by sulphur :

- | | | | |
|------|----|---|---------------------------------|
| I. | CO | { | S C ₂ H ₂ |
| | | | O C ₂ H ₂ |
| II. | CO | { | S C ₂ H ₂ |
| | | | S C ₂ H ₂ |
| III. | CS | { | O C ₂ H ₂ |
| | | | O C ₂ H ₂ |
| IV. | CS | { | S C ₂ H ₂ |
| | | | O C ₂ H ₂ |
| V. | CS | { | S C ₂ H ₂ |
| | | | S C ₂ H ₂ |

Of these I. and III., as well also as II. and IV., are isomeric. In each instance the index of refraction increases with the introduction of sulphur in the place of oxygen, the increment being the greater the larger the amount of sulphur already present in the compound. *Ceteris paribus* the index of compounds containing CS as radicle exceeds that of analogous compounds in which the radicle CO occurs. Again, the index increases by the replacement of first one and then two atoms of the remaining oxygen of the compound, and the effect in the latter case exceeds that due to the introduction of sulphur in place of oxygen in the radicle. The isomeric compounds I. and III., and likewise II. and IV., have quite different indices, and in each case that compound has the greater index the sulphur of which is present in the radicle. The position then of the sulphur atom materially affects the magnitude of the refractive index. The boiling points of these compounds have been determined by F. Salomon (*Ibid.*, 433), and he has found that, the radicle being the same, the introduction of an atom of sulphur in every instance raises the boiling point of the ether 40°C. The exceptional increase in the case of carbonyldioxydiethyl and carbonyloxysulphodiethyl of 31° may be ascribed to a condensation attending the introduction of sulphur. A rise of boiling point of 4—5° attends the introduction of sulphur into the radicle.

The Reactions of the Alkaloids with Sugar and Sulphuric Acid.—It is proposed by R. Schneider (*Four. prakt. Chem.*, No. 19 and 20, 455) to make use of the bright colours developed by the contact of certain alkaloids with sugar and concentrated sulphuric acid as a means for determining their presence. Morphia under these conditions strikes a fine purple, 0.00001 gramme of this alkaloid distinctly exhibiting this reaction. After the lapse of ten minutes the colour turns to a bluish violet. Codeine undergoes the same change, which however is best shown with less concentrated acid. Narcotine and narceine give no characteristic reaction; and the same is true of the cinchona bases. Aconitine develops a fine rose colour which rapidly becomes of a dirty violet. Delphinine, chelerythrine and chelidonine also show characteristic colour reactions.

An Isomer of Hydrocyanic Acid.—With the object of testing the action of anhydrous hydrocyanic acid on epichlorhydrin O. Lange (*Ber. Deut. Chem. Gesell. Berlin*, 1873, No. 3, 99) enclosed these substances in a glass tube and exposed them to sunlight. At the end of three months the mixture had become solid and black. The carbonaceous mass after extraction with water yielded by treatment with ether a new substance, which when purified formed crystals of a reddish-brown colour by reflected light, a garnet red by transmitted light; some of them were 2 mm. in length. Analysis showed it to have a composition expressed by the formula C₂NH. The solution of this body has a neutral reaction and undergoes decomposition when heated, with a separation of a humus-like flocculent substance. The crystals on being heated decrepitate and emit the odour of hydrocyanic acid. An aqueous solution when treated with baryta gives off ammonia and deposits a considerable amount of carbonate of baryta, the liquid containing a body possessing a sweet taste and all the properties of glycocholl. Analysis appears to confirm this. The author explains the reaction in the following way: C₂H₂N₂ + Ba H₂O₂ + 3 H₂O = C₂H₂N₂O₂ + Ba C O₂ + 2 N H₃.

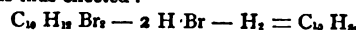
Synthesis of Phenanthrene.—C. Graebe having recently observed that carbazol is formed when diphenylamine is passed through red hot tubes, it appeared probable to him that stilbene, if submitted to similar treatment, might yield phenanthrene. This he has now found to be the case. (*Ber. Deut. Chem. Gesell. Berlin*, 1873, No. 3, 125.) Stilbene was passed through a strongly heated tube filled with fragments of glass, and the products were collected. No hydrogen is given off, but a considerable amount of toluol is formed. On distilling the mixed condensed substances the latter passed over at 110—120° and the temperature then rapidly rose to 310—340°. To identify this body with phenanthrene some of it was oxidized, and the oxanthracene formed gave on analysis numbers that accorded with the formula C₁₄H₈O₂. The author explains the decomposition of stilbene in the following way :



Moreover dibenzyl furnishes under similar circumstances phenanthrene in addition to stilbene and toluol.

Anhydrous Liquefied Ammonia.—A great number of experiments have been made by G. Gore (*Proc. Royal Soc.*, No. 141, 140) to test the behaviour of this liquid towards other substances, 250 different solids and liquids, simple and compound, having been placed in contact with it. In by far the greater number of cases no action takes place. Iodine liquefies and then forms a clear and slightly yellow solution. Liquid C Cl₄ mixes perfectly with the ammonia and is left behind after evaporation. Sulphur dissolves sparingly, liquid chloride of sulphur becomes dark red and solid in the gas and purple in the liquid. Bisulphide of carbon turns yellow and opaque in the gas, and in the liquid ammonia it is changed into a bulky yellow solid. The trichlorides of phosphorus and arsenic are each converted into white solids with manifest chemical action. Oxide of silver swells visibly, but does not dissolve; nitrate of silver is freely taken up and is deposited on evaporation in long crystalline needles. Iodide of silver dissolves rapidly and freely; the chloride and phosphate are insoluble and undergo no chemical change. The chlorides of mercury dissolve readily and the sulphate of this metal imparts a violet colour to the liquid. Thallium undergoes no change, but lithium, potassium, sodium or rubidium induces strong action and forms a deep indigo-blue coloured liquid; the presence of one of the chlorides of carbon prevents the development of this colour. Chloride of ammonium dissolves very freely and does not crystallize till nearly all the liquid has evaporated.

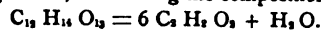
Synthesis of Naphthalene.—This has been accomplished by B. Aronheim by passing bromide of phenyl-butylene in the form of vapour through a tube, filled with caustic lime and raised to a low red heat. Scarcely any charring takes place, and the oily product which crystallizes on cooling is easily identified by its properties with naphthalene. The decomposition is thus effected :



The gas which escapes was found to be hydrogen. As the bromide has been formed synthetically the synthesis of naphthalene has thus been accomplished.

By reducing erythrite with formic acid A. Henniger has obtained (*Revue scientifique*, 15th February, 1873, 785), in addition to the glycol C₂H₄O₂, that has already been described, a hydrocarbon which is absorbed by bromine and produces a solid bromide. This body is tetrabromide of crotonylene, C₄H₂Br₄. It fuses at 116 and sublimes without decomposition. Heated with water it saponifies, forming a compound soluble in that liquid.

Writing last month from Florence, H. Schiff describes (*Ber. Deut. Gesell. Berlin*, 1873, No. 3, 143) a peculiar condensation product of glyoxal. It is formed by adding some hydrochloric acid to a solution of glyoxal in acetic acid and exposing the mixture to a gentle heat for some days. It forms a brilliant white powder, bearing a great resemblance to starch granules, and having the composition indicated below :



It is almost insoluble in ordinary solvents, and is distinguished by its great stability. The new compound he believes contains only a hydroxyl and no aldehyde group.

At recent meetings of the Royal Society, papers bearing the following titles have been communicated to the Society: "The Synthesis of Aromatic Monamines by Intramolecular Atomic Interchange," by A. W. Hofmann; "A New Method for producing Amides and Nitriles," by E. A. Letts; and "Colouring Matters derived from Aromatic Azodiamines (part ii., Safranine)," by A. W. Hofmann and A. Geyger. These contributions to the *Proceedings of the Royal Society* were already some months previously communicated to another society, the German Chemical Society of Berlin. The first two, reproduced in the *Chemical News*, January 3rd, appears in the *Ber. Deut. Chem. Gesell. Berlin*, 13th August, 1872, 704 and 669, and the last, reprinted in the *Chemical News*, December 27th, is in the *Berichte*, 24th June, 1872, 526.

New Publications.

- BARRANDE, J. Système Silurien du centre de la Bohême. 1 Partie. Recherches paléontologiques. Supplément au vol. I. Trilobites, crustacées divers et poissons. Leipzig: Gerhard.
- BERENDT, G. Die Pommerellischen Gesichtsurmen. Berlin: Friedländer.
- BOREL, V. Le Nervosisme et les affections nerveuses fonctionnelles. Neuchâtel: Sandoz.
- CZERMAK, J. N. Ueber das physiologische Privat-Laboratorium an der Universität Leipzig. Leipzig: Engelmann.
- DALL, W. H. Description of three new species of Crustacea parasitic on the Cetacea of the N.W. coast of America. [From *Proc. Cal. Acad. Sci.*, November, 1872.]
- DECHEN, H. v. Erläuterungen zur Geologischen Karte der Rheinprovinz und der Provinz Westphalen. 2 Band, 1 Theil. Bonn: Henz.
- DELESSE ET DE LAPPARENT, MM. Révue de Géologie pour les années 1867, 1868, et 1869. Paris: Cusset.

- FREY, H. *The Microscope and Microscopic Technology*. New York.
- GLOVER, T. *Illustrations of North American Entomology*. Washington.
- HAMY, E. T. *Note sur les ossements humains fossiles de la seconde caverne d'Engihoul, près Liège*. Paris: Hennuyer.
- HYDROGRAPHISCHE MITTHEILUNGEN. Herausgegeben von dem hydrograph. Bureau der kaiserl. Admiralität. 1^{er} Jahrgang. Nr. 1. Berlin: Mittler und Sohn.
- ILLUSTRATED CATALOGUE OF THE MUSEUM OF COMPARATIVE ZOOLOGY AT HARVARD COLLEGE. No. VII. Revision of the Echini. By Alexander Agassiz. Parts I. and II. Cambridge, Mass.: University Press (Wells, Bigelow, and Co.).
- JÜRGENSEN, T. *Die Körperwärme des gesunden Menschen*. Leipzig: Vogel.
- KARTEN UND MITTHEILUNGEN DES MITTEL-RHEINISCHEN GEOLOGISCHEN VEREINS. Section Worms, von R. Ludwig. Darmstadt: Jonghaus.
- LEJEAN, G. *Voyage en Abyssinie exécuté de 1862 à 1864. Avec Atlas*. Paris: Hachette.
- MARTINS, C. *Statistique des savants, histoire des sciences et des savants depuis deux siècles, suivie d'autres études sur des sujets scientifiques, en particulier sur la sélection dans l'espèce humaine*, par M. Alphonse de Candolle. Paris: Claye.
- NEITZSCHÜTZ, M. v. *Studien zur Entwicklungsgeschichte des Schafes*. 2 Heft. Dantzig: Kasemann.
- PONCET, A. *De l'ostéite au point de vue de l'accroissement des os*. Paris: Martinet.
- RAMANN, G. *Die Schmetterlinge Deutschlands und der angrenzenden Länder*. 9 Heft. Berlin: Schotte.
- RELIGIÆ AQUITANICÆ. Part XI. Williams and Norgate.
- SCHRÖN, L. *Siebenstellige gemeine Logarithmen der Zahlen von 1 bis 108,000*. 12^{te} revid. Ster. Ausgabe. Braunschweig: Vieweg und Sohn.
- SELM, A. *Almanacco di chimica agricola*. Anno I. Milano: Battezzutti.
- THOMÆ, J. *Abriss einer Theorie der complexen Functionen und der Thetafunctionen eines Veränderlichen*. 2^{te} Auflage. Halle: Nebert.
- THOMSON, C. W. *The Depths of the Sea: an Account of the General Results of the Dredging Cruises of H.M. Ships "Porcupine" and "Lightning" during 1868, 1869, and 1870*. Macmillan.

History.

Études sur l'antiquité historique, d'après les sources Égyptiennes et les monuments réputés préhistoriques. Par F. Chabas. Paris: Maisonneuve et Cie. 1872.

THE object of M. Chabas' work is to protest against the conclusions at which some of the disciples of Præhistoric Archæology have arrived, and to bring the light of Egyptian history to bear upon epochs hitherto reputed to be præhistoric. M. Chabas, long well known as one of the foremost and most trustworthy explorers of Egyptian antiquity, had his attention drawn to præhistoric speculation in the year 1865 by the accidental discovery of two flint knives embedded in the bank of the river Saone, at a spot situated some distance above the town of Chalon. Continuing his researches he subsequently found immense numbers of objects of antiquity of various kinds, and was able to form his own conclusions as to the manner in which they had been deposited. Other explorers were meanwhile engaged in the same pursuit, and it is perhaps not to be wondered that different opinions have been arrived at as to the epochs at which the various beds which have revealed themselves have been formed. M. Chabas inclines to a much more modern origin for the Saone formations than some other explorers attribute to them, and he shows good reason for doubting the distinctions of ages which have been made. His reasonings apply, however, only to conclusions drawn from the nature of the objects found, and he guards himself from being supposed to contest those drawn from purely geological considerations.

The term præhistoric is one open to much misconception. What is anterior to historic records in one country may be synchronous with a historical epoch in another, and in fact some parts of the globe are even to the present day in their præhistoric period. In Europe all beyond seven or eight hundred years B.C. lies in præhistoric darkness, while in

Egypt the clear light of history stretches back to 3,000 if not 4,000 years B.C. Whatever view we may ultimately arrive at as to the absolute antiquity of man upon our earth, it cannot be otherwise than useful in our inquiries to have a clear perception of the distance to which history in one part at least of the world really goes back, and of the state of civilization which it presents in its earliest strata. Up to the present moment the vision of nearly the entire educated world is limited by a chronology founded upon Greek and Hebrew records. Bunsen's well-founded idea of taking Egypt as the standard of all historical chronology has hardly emerged beyond the small circle of professed Egyptologists. It is true that exactitude cannot be pretended to in calculating the duration of the Egyptian dynasties; but the relative places of all are well determined, and there are records, for the most part contemporary monuments, amply sufficient to fill out 4,000 years. What is most remarkable is that at a very early point, nearly the extreme point at which monuments commence, the culture of the Egyptians is found already at the highest pitch of perfection, and the later ages gradually retrograde from the standard thus early attained. A clear recognition of this fact is certainly indispensable to any sound discussion of the archæological phenomena of Europe and the shores of the Mediterranean. It must at least be a problem worth considering, whether the stone and bronze epochs, which in Europe lie beyond the range of history, were anterior to or coeval with that resplendent period of Egyptian civilization which lies 3,000 years before the Christian era, or with some part of the long period of growing civilization which preceded it, or whether they may not extend very much later down towards the time when Greece first gained historic consciousness.

It is to lay a foundation for considerations such as these that M. Chabas has put together a series of disquisitions upon a variety of points connected with Egyptian civilization, and which may be taken as embodying the conclusions at which the soundest Egyptological inquirers have up to the present moment arrived upon the several points discussed.

In his first chapter M. Chabas shortly summarizes the various chronological schemes of Egyptian history which have been put forward, and judiciously rejecting all pretensions to minute accuracy, where the materials for accurate calculation do not exist, accepts as most probable the view that the reign of Menes, the limit of historical time, may be placed 4,000 B.C., with a præhistoric background of three or four thousand years for the unrecorded growth which brought Egypt to the point of civilization at which we then find her. The second chapter discusses the metals known to the Egyptians, in relation to which we will only note that M. Chabas maintains that iron and even steel must have been in use in the earliest times, although it must be admitted that the specimens preserved are few and the evidence of their antiquity defective. The Egyptian names of the various metals have been recently much discussed by both Lepsius and Dümichen, and some questions must still be considered as *sub judice*.

A chapter follows on the implements and arms of the ancient Egyptians, with which they are found as completely furnished at the earliest as at the latest periods of which we have record.

The longest and most interesting chapter in the book is that upon the nations known to the ancient Egyptians. In the very earliest times there is but little evidence of intercourse between Egyptian and surrounding nations. Yet the northern people, the dwellers on the shores of the Mediterranean, are mentioned as early as the fourth dynasty. In later times the races of the world were divided roughly into four—the Egyptians, Negroes, Asiatics, and North

Africans (the last probably including the peoples of Europe). Recent discoveries have shown that in the nineteenth dynasty (fourteenth century B.C.) the Sardinians, Sicilians, Etruscans, Lycians, and Achæans joined with the Lybians in an invasion of Egypt, and to these M. Chabas now adds Daunians, Oscans, Teucrians, and Pelasgi.

The people called in Egyptian spelling Tzakkriu were supposed by the late Dr. Hincks to be the tribe of Issachar. Others have quartered them elsewhere, but the identification with the Teucrians seems well-grounded. The Dardans were already known as figuring in the campaign of Rameses II. The people called Purista or Pulista have been hitherto taken for Philistines, but there is little more to support the view than the resemblance of names. The Pulista as drawn on the monuments are not of Asiatic type, and they are expressly said in one record to have come with the Tuirsha (Etruscans) from the midst of the sea. We have little doubt that in Pulista we have a form of the name Πελασγοί, and thus this mysterious people is brought into the full light of history, with its arms, costume, and accoutrements. The picture of a naval conflict between the Egyptians and the Pelasgi Teucrians and their allies, one or two hundred years before the presumed date of the Trojan war, although not a very choice specimen of Egyptian art, is worthy in many respects of the attention of Homeric commentators. Another picture of a skirmish between the Sardinian mercenaries of Egypt with the Pelasgian and Teucrian invaders, shows us that these people brought with them their wives and children, and we have representations of the carts drawn by oxen in which they carried them. This would seem to indicate that some of the invaders contemplated permanent settlement in Egypt.

In a chapter devoted to the stone arms and implements used by the Egyptians, M. Chabas shows that flint knives, saws, and cutting instruments were not only in use in the earliest periods of Phææonic history, but that they continued to be employed under the Greeks, Romans, and Arabs; nay, that their use is not wholly extinct at the present day. Tools of flint appear to have been used almost exclusively in the working of the copper or turquoise mines of Sinai, under the early Pharaohs. In Egypt itself immense numbers of flint implements of every kind have been found in the neighbourhood of cities and cemeteries, and it is remarkable that the most finished of these instruments are those to which the highest antiquity is attributable, while those which belong to the Ptolemaic and Roman epochs are of a ruder character. The conclusions which had been hastily drawn as to the extreme antiquity of the immense repositories of flint tools which have been found in the neighbourhood of Thebes, fall to the ground. A great many of the specimens which have been picked up appear to be nothing more than fragments split by natural causes; but a certain number show indubitable marks of human skill. How far back the inhabitants of Egypt may have availed themselves of the rude tools with which Nature furnished them, it is impossible to say; but it is capable of demonstration that they continued to use them in a rough state until the latest times. Thus the præ-historic stations which it was thought had been detected on the barren deserts which lie close to Thebes, Memphis, and the other great cities of the Nile valley, were the repositories of cheap tools for the poorer inhabitants during thousands of years of historic time, and it is impossible to draw from them any conclusions as to the condition of the first settlers in the country.

In the sixth and seventh chapters of his work M. Chabas has brought together much interesting matter as to the horse and the camel, and the knowledge which the Egyptians had

of these animals. Neither of these creatures were indigenous, and they are not mentioned in the earliest monuments.

The last chapter is devoted to a consideration of the localities which have been considered præhistoric, and to M. Chabas' own discoveries in the valley of the Saone. He arrives at the conclusion that science has not hitherto demonstrated a very high antiquity for man antecedent to the historic period. Admitting the force of much of the argument of the learned Egyptologist, we must express our own belief that the antiquity of man rests upon quite other considerations than any that can be drawn from the works which he has left behind him, and that the question is one which lies principally in the sphere of geology. Nor does M. Chabas in fact contest this. But he argues that although man may be proved to have been the contemporary of the reindeer and the mammoth, there is nothing to show that the man of those periods stood at a lower point physically and intellectually than races which have existed in historic periods or even which exist at this day. However this question may ultimately be decided, M. Chabas' work is unquestionably an important and timely contribution towards the consideration of the problems which the recent growth of præhistoric inquiry has raised. C. W. GOODWIN.

Notes and Intelligence.

The Records of the Notaries of the Capitol at Rome.—F. Gregorovius, the historian of the city of Rome in mediæval and modern times, has opened recently some new and highly important sources in intimate connection with his subject. In a paper read before the Historical Section of the Royal Society of Munich (see *Sitzungsberichte der philosophisch-philologischen und historischen Classe der K. B. Academie der Wissenschaften*. 1874. Heft. iv.) he gives a lucid account of the records of the notaries of the capitol at Rome, and especially of the minute-book of the notary Camillo de Beneimbene, from 1467 till 1505. It appears that, whereas formerly the urban notaries were accustomed to preserve their papers in their private chambers, a central record-office was erected on the capitol during the pontificate of Pius IV. (1559-1565). Afterwards by the bull of the 1st June, 1587, Pope Sixtus V. gathered these very ancient public servants into a college, or corporation, with certain office-bearers, and limited it to the number of thirty real members, in which shape it is still flourishing.

Among the volumes of their record-room, representing many centuries, hardly any other excites so much curiosity as the register once kept in a stout quarto volume of 1063 leaves by Camillo de Beneimbene, the fashionable and long-lived notary during the reigns of Paul II., Sixtus IV., Innocent VIII., Alexander VI., Pius III., and during the two first years of Julius II. The book, indeed, abounds in references to the period of the renaissance in general as well as to the private history of its most celebrated contemporaries. A man like Camillo was initiated in all the family transactions of the houses of Rovere, Cibo, Borgia, Medici, Alviano, Orsini, Colonna, and many more. All the successive matrimonial contracts of Donna Lucrezia Borgia, for instance, were drafted and executed by him. In this volume of minutes the whole history of Rome during a most stirring period of transition passes as it were before our eyes. No wonder, therefore, that a scholar like Gregorovius has not only largely excerpted from such treasures, but has selected for publication certain very curious extracts referring generally to the history of Cardinal Roderigo Borgia, afterwards Pope Alexander, his children, their friends and rivals. It is hardly necessary to mention how much light is thrown by these instruments of matrimony, divorce, and inheritance upon the moral history of Italy in the days of her literary and artistic glory.

Now and then, however, there occurs a document of value for foreign history. In 1740, by order of Pope Benedict XIV., the French Government obtained from this volume the original of a solemn act, dated the 6th September, 1494, by which Andreas Paleologus, despot of Romania, ceded to King Charles VIII. of France all his rights to the crown of the Byzantine Empire, an authenticated copy being now inserted in the vacant place.

In the month of March, 1504, Cardinal Adriano Castellesi bequeathed his palace in the Vatican borough to King Henry VII. of England. Some quotations from the instrument drawn up at the time will interest English students of this eventful period:—

"Rmus. in Xpo. pr. et dom. Hadrianus S. R. E. pres. carlis. tit. S. Crisogoni: Ex ratione benefactorum munerum ac meritorum que habuisse et suscepisse in rei veritate recognovit—confessus fuit et in futurum habere et suscipere sperat a Sermo. Dno Henrico Anglie Rege, de sua mera et gratuita voluntate liberalitate et largitate ac omni meliori modo via jure

causa et forma quibus magis et validius et efficacius fieri potest : donavit et donationis titulo. . . . concessit eidem Sermo. D. Henrico Anglie Regi absenti velut presenti et suis heredib. et successorib. et cui vel quibus ipse Sermus. Rex et sui heredes et successores cedere donare et transferre voluerint etiam si pro natione Anglica in urbe Romana vel pro usu et habitatione oratorum sue regie maiestatis ad urbem et roman. curiam proficiscentibus et in urbe et Romana curia residentib. vel aliter quomodocunque et qualitercunque disponere voluerit et sue regie maj. vel suis heredib. et successorib. placuerit. . . . quasdam ipsius donatoris edes et edificia nondum perfecta insigni opere marmor. et lapidum tiburtinor. ornata et ad non parvum Urbis decorem et splendor. de suo proprio et privato peculio et redditib. officior. suor. . . . fabricatas. Que quid. edes site sunt in burgo Basil. B. Petri prin. apostol. in via Alexandrina cognominata per fel. rec. Alexan. pp. vi. noviter constructa, quib. a latere anteriori est dicta via publica Alexandrina, a latere posteriori est via Sixtina prope muros quib. itur ad castrum S. Angeli a latere versus palat. apostolicum est via publica prope domum et hortum Rmi. D. Francisci Caroli. Volaterrani ab alio latere versus castrum S. Angeli est via quam dictus R. D. Caroli. S. Grisogoni dimisit ad effectum quod dicta domus esset in insula prope dom. et hortum bo. me. Caroli. Aleriensis."

It needs hardly be added that the Cardinal's palace is no other building than the beautiful edifice erected by Bramante, known to-day by the name of Palazzo Giraud-Torlonia. For all I know it must have remained the property of the English crown till the days of Clement VII., when Henry VIII. emancipated his realm and church from Papal jurisdiction.

R. PAULI.

It is well known that the *Monumenta Germanica Historica* were started more than fifty years ago under the powerful influence of the great Baron Stein, the necessary funds being supplied by periodical votes in the Diet of the late Germanic Confederation. A learned society, "Die Gesellschaft für ältere deutsche Geschichtskunde," was to superintend the actual work and those engaged upon it. And even to this day there is at Frankfurt a committee of their members acting as trustees of the original founders and representing the rights of the various governments contributing the means, as long as federal principles prevailed in Germany. But not only the re-establishment of the empire under Prussian supremacy necessitates changes in the provision for this important branch of historical literature, but the old age of Dr. Pertz, who from the beginning has conducted the editorship nearly like a monarch, requires much more than a personal substitute. On the one hand the Royal Academy of Berlin is anxious to obtain the supreme direction of this truly national work, of which hardly the fourth part of the original plan has been completed. The public papers state that Professor Lepsius has been deputed by the Academy to settle matters with Dr. Pertz. On the other hand the Frankfurt committee is sure to raise the claims of the founders and contributors. It is, however, to be hoped that both sides may soon agree, as in that case they without doubt will find both the Prussian Government and the Imperial Diet most willing to continue the necessary supply of funds for a new and satisfactory arrangement in the editorial staff.

Since Ranke vacated his chair in the Berlin University and Jaffé died, great and not very successful endeavours have been made to promote the study of history in the capital of Germany. The enormous rise in the expenses of Berlin life are unquestionably in the way. Professor Nitzsch has been induced to remove from Königsberg to Berlin, but Waitz declined to leave Göttingen more than a year ago, and so did lately Dümmler of Halle. Two first-rate men are still required to support Droysen and Nitzsch, one for teaching history methodically, and another for the subservient disciplines of chronology, paleography, and diplomatics. We are glad to add that according to the latest news Professor Wattenbach, at Heidelberg, has at last agreed to accept the latter chair, which nobody else is so competent to occupy.

On the 9th January died, thirty-five years old, at the vicarage of Leonberg, near Stuttgart, in the house in which both Paulus and Schelling were born, the son of the aged incumbent, Dr. Sigurd Abel, who after having been educated chiefly at Göttingen began to lecture there in mediæval and modern history. Soon after his promotion to a chair in the University of Giessen he was prostrated by a disease of the brain. He published a dissertation on the fall of the Langobardian realm in Italy, 1859; the first volume of the *Annals of the Reign of Charles the Great* for the Historical Commission at Munich, 1866; and, among minor papers, an essay on political parties in England, and the coalition between Fox and Lord North, in Sybel's *Hist. Zeltsch.* xvii.

There has been a rather unusual interruption in the publication of the "Generalstabswerk," the work which is to enshrine the memory of the German-French war of 1870-1 from the point of view of its greatest master, Field-Marshal von Moltke himself. The second "Heft," issued six months after the appearance of the first, treats chiefly of the days from the 1st to the 5th August, 1870, including the insignificant attack on Saarbrücken by the French, and their first defeat at Weissenburg on the 4th. Three excellent maps illustrate the

beginning of the great campaign, and will be undoubtedly reproduced by this time in the various translations preparing for military readers all over the world.

The Archæographical Commission of St. Petersburg is about to publish in that city a new edition of the Chronicle of Nestor according to the Lavrentievsky MS. The text will be accompanied with the principal various readings and a table of contents. It is edited by M. Byckov, chief librarian of the Imperial Library at St. Petersburg.

The second volume of the *Monumenta historica Poloniae* by M. Bielovsky has appeared at Lemberg. It contains among other documents extracts from two chronicles of the German Monastery of Zwiefalten, of bulls and letters relating to Poland, fragments of the life of St. Otho of Bamberg, the chronicles of Mierzwa, of Vincent Kadlubek, of Boguchwal, and of John Garukow, and a certain number of year books or *roczniki*.

The Commission appointed by the Ministry of Public Instruction in Russia to arrange and publish the letters and papers of Peter the Great has commenced its labours under the presidency of Count Tolstoi, Minister of Public Instruction. M. Byckov has been chosen secretary of the Commission.

New Publications.

ANZEIGER DER DEUTSCHEN VORZEIT. Organ des germanischen Museums. Neue Folge. 20 Jahrg., 1873. Nürnberg.
CAIRNES, J. E. Essays in Political Economy, Theoretical and Applied. Macmillan.
EWALD, A. C. Life and Times of Algernon Sydney. Tinsley.
FREEMAN, E. A. Second series of Historical Essays. Macmillan.

Philology.

Unexplored Syria. Visits to the Libanus, the Tulûl el Safâ, the Anti-Libanus, the northern Libanus, and the 'Alâh. By Richard F. Burton and Charles F. Tyrwhitt Drake. Two volumes. London: Tinsley Brothers.

IN this work Captain Burton communicates the most important results of a stay of almost two years in Syria. The whole of it was occasioned and influenced by him, though only about half comes directly from his pen. What we here receive inspires us with extreme regret that the author was so soon called away from his post in Syria, as well as that his friend Tyrwhitt Drake failed to meet with that support from his countrymen which he had a right to expect. Captain Burton leaves the reader to divine the motives of his antagonists, but we receive the impression that he is fully justified in his complaints. No doubt so impetuous, energetic, and "subjective" a spirit may here and there have given unnecessary offence; the conflict with the Turkish authorities can hardly have arisen simply and solely from their own baseness, and it might at the outset be questionable to entrust a man with the care of English interests in Syria, of whom it could not remain a secret that he had committed that terrible offence in the eyes of a Muslim of having made the pilgrimage to Mecca as a Christian. For all this there seem to have been hostile influences at work which are the reverse of creditable.

It was well known that much yet remained to explore in Syria; yet it is certainly surprising to learn that even regions in the immediate neighbourhood of Bairut and Damascus had so escaped attention that Captain Burton had to make out the character of the ground for the first time. The excursions in Libanus, Anti-Libanus, Trachones, and the 'Alâh, described by Mrs. and Mr. Burton and Mr. Tyrwhitt Drake, add much new information about the topography, which will correct the very best maps in essential particulars.

Even one who had never seen Syria might be pretty certain that it was not a land rich in beautiful scenery, and that even the admired Damascus derived its principal charm from its contrast to the desert: but this is not enough for Captain Burton. According to him both Libanus and Anti-Libanus are deficient in almost all the elements of beauty and sub-

limity. The irrigation is generally insufficient; whole districts are completely waterless. Trees were sorely missed; there were only two places in all Syria where Captain Burton saw anything which could be called a forest, viz., on the west slope of Hermon. The famous cedars are represented as "a badly-clad, ill-conditioned, and homely growth; essentially unpicturesque, except, perhaps, when viewed from above." As far as a small but good photograph enables me to judge, the description is not exaggerated. The forms of the mountains too are said to be seldom beautiful or imposing. No doubt the judgment of the author may be somewhat influenced by the fact that he had previously seen the lofty beauty of the Andes. The very similarity of the relation of the double chain of the Andes to the coast extended before it to that of Libanus and Anti-Libanus to Phœnicia could not but make these landscapes seem petty and unattractive. It must be mentioned that Tyrwhitt Drake found beautifully wooded parts in the north of Libanus, which reminded him of northern regions. But even if Captain Burton is somewhat too disparaging towards the beauties of Syria, there have been much greater exaggerations on the other side. He is quite right in ridiculing the malady which he calls "the Holy Land on the brain;" the fascination exercised by religious romance on most cultivated visitors of Syria and Palestine, particularly on the Protestants, and most of all on the English and Americans, a fascination which deludes by the appearance of landscape beauties which have no real existence. It is some excuse that most travellers, coming direct from the dim atmosphere of the north, have their first experience of a transparent air and a clear sky in Syria, so that forms and colours seem quite otherwise to them than at home. Besides, it is not only travellers who are taken ill with "the Holy Land on the brain," but students of that country's literature. What a bright picture is often drawn of the great days of King David, though the repeated revolts and the family dissensions show that it was very questionable felicity.

The sobriety of the author's estimate, however, has not impaired his interest in countries which have been so influential for the weal and woe of humanity. He is well aware of the high importance of Syria, and insists that every inch of the ground should be thoroughly explored. He has examined not only the topography, but the ruins. He too finds that there is very little remaining above ground in Syria of greater antiquity than the time of the Romans. He justly ridicules those who see in the buildings of the Haurân, which are mostly of the Christian period, the cities of the gigantic king Og. It is pointed out that the notion of a greater stature among primitive nations is contrary to all reasonable experience. The only question that remains is, how to explain the wide prevalence of such a view on psychological grounds.

Although the inhabitants of Syria are better known to us than its soil, I cannot help wishing that the author had spoken at greater length about the former; what he gives us only whets the appetite for more. His opinion of the population is on the whole as favourable as his account of the government is the reverse. I almost fear that it is a little too favourable. He tells us himself how untruthful, covetous, and ungrateful the Syrians are. And some of the proverbs of the Damascenes which are published in this work imply a terrible degree of insincerity; e.g. No. 74, "The hand which you cannot bite, kiss it, and pray that it may be broken." It is easy, of course, to make the misgovernment of centuries responsible for such features in their character; at any rate it would be a task of extreme difficulty even for a good government to produce passable fruits from such a soil. We must certainly agree with him, that the roads and rail-

ways of the future will be the principal factors in the civilization and moral elevation of the inhabitants of Syria. He evidently expects more from these than from the activity of the Protestant missionaries. I wish so independent a man had given a public opinion of the real and pretended results of these agents. For the rest, this book furnishes us with additional evidence of the uniform superiority of the Muslims to the Christians in the Semitic countries. Tyrwhitt Drake, in particular, gives a most unfavourable account of the Syrian Christians; he remarks, no doubt with justice, that the reprehensible features in their character stand in a certain relation to their religion (that is, to the form which Christianity has assumed among them). Precisely the same estimate is given of the Copts of Egypt by all good observers, and that these are not only the sad consequences of political and social oppression is clear from the yet lower moral condition of the Abyssinians, who have had a constant succession of national and Christian rulers. It is true that both the United and the non-United Nestorians in the far East are, apparently, more advanced in the moral scale. But the only Christians of the East proper who to all appearance have a real future before them are the non-Semitic Armenians.

There are also very interesting communications on the migration of the Druses to the Haurân. Disgraceful as this migration is for the government, Captain Burton considers it fortunate for the country. The industrious Druse peasants in their easily defensible mountains form a bulwark against the Beduins—for it is still the first requisite of civilization there, as it was in the time of Gideon, that the robbers of the desert should be restrained. It is true, however, that the establishment of the Druses in the ruined cities of the Haurân is fatal to the ancient buildings of which they are composed. He naturally despairs of any changes in the Turkish policy for the advantage of Syria. Yet it is very doubtful whether a native government would be in any respect better than the Turkish. Our own immediate wishes, like those of the author, must be for a really energetic policy on the part of England, for though the influence of the latter is here said to be on the wane, no other power is in a position effectually to advance the interests of culture and progress.

Praiseworthy pains are bestowed on the orthography of Arabic names. Here and there we even observe the use of the Arabic geographers, though it is true that they have not been made to yield their utmost of illustration. I may mention for instance, that the view that 'Anjar is contracted from 'Air (al-) jarn is confirmed by Yâkût. The linguistic failings of Captain Burton should have been unmentioned were it not that he takes a capricious pleasure in giving philological explanations, particularly of proper names. Success was all the more improbable, as Arabic is far from sufficient in those regions; in Syria, especially in Lebanon, there are still many Aramaic names. No one can demand of Burton that he should have studied the Semitic languages and antiquity in a strict historical and philological school; but for this very reason he should have been more circumspect in referring to such subjects. A more thorough knowledge, for example, would have prevented him from praising the well-intentioned but wholly unripe work of Dr. Inman, *Ancient Faiths embodied in Ancient Names*.

Among the various appendices I have already mentioned the collection of proverbs of Damascus. They are throughout expressed in the modern dialect; though I have found at least one which, derived from a poem in the classical language, has still preserved even its metrical form (No. 134). The paraphrases and short commentaries will be welcome even to those Arabists who have devoted themselves more than I have done to vulgar Arabic.

The work derives a special importance from its inscriptions. It presents us with the first exact copies of those of Hamah, which would not improbably, even if they contained little but proper names, throw a new light on the ancient history of northern Syria, if we could only decipher the entirely unknown characters in which they are written. Unfortunately there is not the remotest prospect of our being able to do so. The writing consists of several hundred characters, and the language is entirely strange; so that the discovery of bilinguals would be our only hope of success. Without them, it would have been impossible to attempt the decipherment either of the hieroglyphics or of the cuneiform inscriptions. Thankworthy as Mr. Hyde Clarke's statistical data are, his comparison of single characters of these inscriptions with similar ones of known alphabets of an entirely different type is not likely to be more fruitful than his fantastic ethnological hypotheses. Whether the decipherment of the Cyprian inscriptions, which is at least not yet to be despaired of, will throw any light on the stones of Hamah, time alone can show. The conjecture is at any rate justified, that these carefully wrought inscriptions are of extreme age, and belong perhaps to the ancient Cheta (of whose identity, by the way, with the Hittites of the Bible I am not yet thoroughly convinced).

Captain Burton also gives four other Oriental inscriptions, which, however, deserved to be copied more accurately. This is evidently the case with the single Arabic one (vol. ii., plate 1), which is composed in good Kūfi, and must be easy to read in the original. It is the funerary inscription of one 'Abd-assamad b. Marwān al. . . . , and is preceded by two passages of the Koran (Sur. 3, 16; 37, 180-182); I fail to make out the date from the copy. Of the other Arabic inscription (*ibid.*), in the florid Kūfi which was much in vogue at certain times in inscriptions on buildings, all that I can make out for certain is the well-known introductory formula, "In the name of God," &c. As for the inscription at the right hand top corner of the same plate, I am not even certain whether it is Kufic or Nabatæan; the drawing given at page 115, vol. ii., is altogether undecipherable. The great mass of Captain Burton's inscriptions are Greek. Some of them had been already given by Waddington and Wetzstein, and since the copies of the former accomplished epigraphist are on the whole, as might be expected, far the best, Mr. Vaux, to whom Captain Burton entrusted them, may be excused for determining not to publish the fresh copies. It would have been still better, however, to print them, since even the best transcript is liable to errors, which another, favoured by a better light or more abundant leisure, may perhaps avoid. It is also important, when a strange or peculiar reading is in question, to have its existence established by more than one copy; this remark applies to the large number of inscriptions which, in spite of the arrangement referred to, are given by Captain Burton as well as by M. Waddington—among them is the long funerary inscription on pp. 160-163 (see Waddington, 2145 a-c, Wetzstein, 129). It is true that the superiority of Waddington's copies is brought out all the more clearly by the comparison; notice, for example, the round Sigma in Burton 147, whereas Waddington 2154 expressly affirms the indented Σ, which is also given in Wetzstein 138. In Burton 56 a whole series of characters is wanting in the middle; see Waddington 2537 a, &c. Unfortunately this overlooking of the inscriptions already published is only a small instance of the manner in which Mr. Vaux has acquitted himself of his task. Captain Burton could not easily have found a man less fitted to edit the inscriptions. His readings abound with blunders which would be discreditable even in a beginner. Words

which are perfectly legible were to him undecipherable. This may give some idea of the probability of his attempts to fill up lacunæ. It is difficult to believe that he has devoted even one careful perusal to M. Waddington's work, besides which he is clearly deficient in the requisite knowledge of facts. I am really astonished that one who belongs to the most Bible-loving of nations is so little at home in the Psalms that he fails to recognize the simplest quotations from them, though they were from the first to be expected in such Christian inscriptions. If, for instance, he had observed that No. 15 is composed of Ps. cxvii. 26, 27 (according to LXX.), lxvi. 10, lxvi. 4 (ἡσασθε=ἱσασαι), he might have spared his marks of interrogation and erroneous supplements; and so too with No. 24 (Ps. iii. 7, &c.), No. 60 (Ps. cxxvi. 1, an appropriate passage, and one that often recurs in inscriptions of this kind), and others. In No. 20 the reading is quite distinct, ἐὼς πατρι κα[ι] Ὑ[ψ]ῖς καὶ ἀγίῳ Πν[εύ]μα. ὁ βοηθῶν Σαβί[ω]ν, with an error of syntax which is not unfamiliar in these inscriptions for τῷ βοηθοῦντι Mr. Vaux, however, reads ἐὼς πατρι κα[ι] ὑψίστῳ καὶ ἀγίῳ πνεύματι [πνευματι] βοηθῶν [βοηθεῖ] Σαβί[ω]ν—which would produce a new phase in the development of the dogma of the Trinity, according to which the latter was composed of the πατήρ, the Ὑψίστος, and the πνεῦμα. But let church historians beware of making use of this discovery! Several inscriptions Mr. Vaux has not been able to read at all, though they can be deciphered either in whole or in part without any great trouble. In short, this whole part of the work is *thoroughly unsatisfactory*, and it is urgent that such important material should soon be thoroughly well edited over again by a competent scholar.

The character of these Greek inscriptions is sufficiently known from Waddington; they supply us in points of detail with many valuable notices. In Burton as in Waddington there are but very few Semitic proper names in the inscriptions from north Syria, while there are several in those from the Hauran and the neighbouring districts, some of which were hitherto unknown. The language of the inscriptions presents the usual peculiarities. If we may rely to some extent on the exactness of the transcriber, No. 136 exceeds all that was previously known in barbarisms of language;—τοῦτον μνημῖον τοῦ Γουζάδου (?) καὶ ἐκτελεσεν (i.e., ἐκτίσεν) αὐτὴν Μάξιμα γυνὴ (i.e., γυνή). But it is possible that a few letters have to be supplied after γυ, and that the first word should be read τοῦτο τό. There is one versified inscription (No. 34), which is mutilated at the beginning; it is composed till near the end in iambic trimeters.

The book contains an additional contribution to epigraphy in a discussion of the inscription of King Mesha, which, however, so far as it is new, will scarcely be approved by the best scholars.* Undoubtedly there are a few discrepancies between the inscription and the Old Testament with regard to which the authentic record is naturally of much greater importance than the partly legendary notices; but Captain Burton very greatly exaggerates the magnitude of these discrepancies, not observing that the stone must have been set up before the siege, and before the sacrifice of the king's son. There is no reason at all for doubting the latter event; the raising of the siege was, no doubt, regarded by the Moabites, and indeed the Israelites too, as a result of the assistance which Kamosh, reconciled by the sacrifice, once more vouchsafed to his people. Of more interest are the author's remarks on the melancholy history of the discovery and destruction of the stone. On the whole one must agree with him, though there may be room for difference of opinion on some minor points. It was a piece of negligence, astonish-

* Cf. our remarks on Captain Burton's two papers on the Moabite stone in the Athenæum (*Academy*, vol. iii., p. 180).—Ed.

ing even in a missionary, that Mr. Klein took no copy of the inscription; and my distinguished friend Petermann has shown that one can be a most learned man and yet not have the diplomatic gifts which are desirable in such negotiations with Orientals. Everyone who knows the circumstances is convinced that had Dr. Wetzstein been in Mr. Petermann's place, he would have secured the stone. Lastly, it must always be fully admitted that M. Gauneau has the merit of having rescued what remained of the stone to rescue.

Mr. Tyrwhitt Drake's essay on the rules followed by the Jews in writing the Pentateuch-rolls was hardly called for. It is chiefly based on Maimonides, contains scarcely anything new to the scholar, and is unnecessary for the general reader. The well-known Mr. Shapira was here the author's mentor; one is almost led to suspect that he wished to do business with certain Pentateuch-rolls in his possession, which he would make out to be older than the Mishna. That the author of this essay is not accurately informed with regard to the critical questions at issue, that, for instance, he places the *Megillath Sopherim* too early, is an excusable fault.

I can form no judgment as to the value of the purely scientific portions of the work, but may be allowed a suspicion that they might without detriment have been condensed. What, for example, is the good of repeating the tirades of the Abbé Richard (vol. ii., p. 294, &c.) against the high antiquity of the human race?—a fact of which no one is any longer in doubt, except those who are guided by *dogmatic* considerations.

It was only natural to form high expectations of the map attached to the work, especially as a severe judgment is passed on the current maps of Syria. Unfortunately our hopes are disappointed. The scale itself is too small, and the places which occur in the text are not all to be found. The map even embodies views which are rejected in the text of the work, e.g., the identification of the Lithāni with the Leontes, against which it may also be urged that, as far as I can see, the name of Leontes does not occur at all in Greek and Latin literature. The map of the 'Alāh, which is referred to in the text, is altogether wanting. At any rate it is to be hoped that a really good map, or rather several maps, will be given in a second edition. The rest of the illustrations are of no great pretensions, but quite adequate to their purpose.

It was inevitable that the review of a book which the author himself calls a *pot-pourri* should present a slightly motley appearance; let me add once more expressly, in conclusion, that the work is, in spite of some defects, a highly meritorious one.

TH. NÖLDEKE.

P.S.—A very interesting section of the work describes the structures to which the lake of Homs is due. It is a remarkable confirmation that the careful writer Abulfidā (circ. 1300 A.D.) describes this lake, which was in his native place, in quite similar terms to those of Mr. Burton, and also affirms its artificial origin. The erection of the great dam is, according to him, attributed by some to Alexander. But Jewish authorities of much greater antiquity (see Neubauer, *Geographie du Talmud*, pp. 24, coll.—though I cannot follow him in his interpretation of many of the passages) say expressly that *Diocletian* laid out the lake of Homs. It would be very desirable that the correctness of this assertion, to which I attribute great authority, should be tested by competent archaeologists.

Morkinskinna. Pergaments-bog fra første halvdel af det 13de aarhundrede, indeholdende en af de ældste optegnelser af Norske Konge-Sagaer, udgiven af C. R. Unger. Christiania, 1867. (As a University program).

THE *Morkinskinna*, or the "Rotten Skin," thus called by Torfæus, because of its singed, black, and rotten con-

dition, is now preserved among the Icelandic vellums in the Royal Library at Copenhagen (the Old Collection, No. 1009 fol.), and was brought thither from Iceland in 1662 by Torfæus with ten or twelve other vellums (the Eddas, the Flatey-Book), all being a present from Bishop Brynjolf to the King of Denmark. The volume is written about the middle of the thirteenth century and in two handwritings; it is defective by several leaves in the middle, and mutilated at the end; besides, the edges and corners are singed, burnt, torn off, and blackened, so that it is very difficult to read; sometimes it baffles all decipherment; happily a text of the same family, although of a later date, is preserved in the third and last handwriting of the Flatey-Book, as also in the Fagrskinna, from which sources the text can be supplemented, and lines filled up, which is often done in the Edition, these insertions being marked with small types.

The text of the *Morkinskinna* consists of the Lives of the kings of Norway, but only beginning with King Harold Hardradi, then running on probably (for the end is missing) down to King Sverri. The text bears often the marks of great antiquity, and seems to represent a text older than Snorri's. The genealogies are carried down to about 1220 (Skúli is, p. 122, called "Earl," which he became in 1217); a Swedish king, Jon Sörkviss (1216-1222) is named "King Sörkvir, father of King John," p. 169; the MS. itself cannot be of much later date. A chief ornament of the text are the many inserted episodes, which are here told in a better, quainter, and more original form than in any other text (the Hulda not excepted), containing old words, forms, and phrases, which in the other texts have been obliterated and replaced by more common words, e.g., many instances of the suffixed verbal negative. Of all the old recensions this comes nearest to the lost Hryggjarstykki, by Eric Oddsson, especially in the saga of Sigurd Slembi. The writer seems to have had that work lying before him, so that sometimes we have the very words of the lost original; it also contains two or three fresh anecdotes—e.g., the story of the poet Einar Skulason, not found elsewhere. In the Saga of Harold Hardradi, the story of Hakon Ivarsson (p. 81-93), and his falling out with the king, are here told in a much better and truer shape than in any of the other recensions; the text of the Hulda (Fms. vi.) is here inferior, not to speak of the Heimskringla. The same text is contained in the third handwriting of the Flatey-Book, which is to be regarded as a sister vellum to our *Morkinskinna*. The account of the invasion of England under King Harold (p. 109-120) agrees with the text in Fagrskinna, containing many improvements, although chiefly in words and phrases, on the other texts, and deserves to be consulted by every student of those events.

We noticed, in a former article, the minced and mutilated text of the Heimskringla in her latter parts, owing to the unskilled hand of compilers or abridgers, who strove to contract sentences, skipping now and then from one full stop to another. Mr. Freeman (in his work, vol. iii., p. 366, the footnote) says that the Icelandic saga "oddly enough" does not relate the death of Earl Tostig in the battle of Stanfords-bridge. This is true, but only of the Heimskringla text, for the compiler happens here to have skipped over a whole sentence—leaping from one full stop to the next, not from any inadvertency as a transcriber, but, as in a hundred other instances, in order to make a short cut. The text of the Hulda, as well as that of the *Morkinskinna* and the Fagrskinna, presents here the full text; thus the *Morkinskinna* says (p. 119): "This fight was hard, but not long; there was a great manslaughter in the ranks of the Northmen. The Earl fought bravely, following the standards, but at last he fell

there with great valour and good fame." Add another instance even more telling, but not bearing on the history of England. We find in our sagas the lives of the kings of Norway, but not of the Norse people; thus it happens that we find but scanty accounts of Norse law-suits (such as, e.g., for Iceland, are contained in the excellent *Njála*, and everywhere in the sagas). For Norway there are only two chief sources—a chapter in the *Egil's saga* referring to the tenth century; but a still better and more authentic report is contained in a special narrative, called *Thinga-saga*, a law-suit between the two brother-kings, Sigurd and Eysteinn, of the beginning of the twelfth century, where the parties appealed from one court and law-parliament to another. This highly interesting narrative, clear and lucid when read in the *Hulda* (Fms. vi.), or in the *Morkinskinna*, p. 174-185 (inscribed, "*þinga-saga milli Sigurðar konungs ok Eysteins konungs*"), is in the *Heimskringla* given in a very much abridged text, faulty and confused, misstating even the local names—a worthless and bewildering compendium. In fact, the legend of the excellency of the text of the *Heimskringla* above all other texts, as held up by Peter Erasmus Müller, has to be discarded, or has to be upheld *cum grano salis* according to inner evidence; and historians who wish to consult the Icelandic sagas have constantly to bear this in mind.

G. VIGFUSSON.

THE RÂMÂYANA AND HOMER.

To the Editor of the ACADEMY.

SIR,—In drawing the attention of your readers to the patriotic indignation of some learned Hindoos against my paper on the *Râmâyana*, the author of the article "Intelligence" in your No. 65, p. 58, states its purport in the following terms:—"The paper referred to attempts to prove that Vâlmiki, the composer of the Hindu epic, was acquainted, either directly or indirectly, with *Homer's Iliad*; and that the main plot of his composition—the abduction of Sîtâ to Lankâ (Ceylon), as well as several other incidents—were taken from the Greek poem."

I beg to decline this representation of my views as a true one. What I maintain is simply this:

"It is possible that in the addition of these two elements (the abduction of Sîtâ by Râvana and the siege of Lankâ) to the earliest form of the story told in the *Râmâyana*—as we find it in the Buddhist legend—we should recognize the influence of an acquaintance on the part of Vâlmiki with the Homeric *saga-cycle*, just as other stories belonging to the cycle have found their way into the Buddhist legend." (Boyd's translation in the *Indian Antiquary*, 1872, p. 252.)

"I do not imagine that he (Vâlmiki) had himself studied Homer, or even that he must have been aware of the existence of the Homeric poem." (Ibid, p. 173.)

"I content myself with the simple assumption that in consequence of the mutual relations which Alexander's expedition into India brought about between the inhabitants of that country and the Greeks, some kind of knowledge of the substance of the Homeric story found its way to India." (Ibid.)

I have not seen the "dignified" review of my essay by *Kâshindh Trimbak Telang*, who "endeavours to refute my arguments one by one;" but as "he lays particular stress on the total want of correspondence in the delineation of the various characters introduced in the two poems," it appears from the foregoing statement of my real opinion, that he fights as much against windmills as Bâbû Râjendralâl Mitra does, who has "succeeded" in "ridiculing and condemning" in a "bantering and ironical style," and to "demolish with great effect" MY (!) theory: "that the *Râmâyana* of Vâlmiki is simply an Indian translation of *Homer's Iliad*." (*Hindoo Patriot*.)

Lassen wir ihnen dies unschuldige Vergnügen!

Allow me to add besides a short remark on a notice of *Bhandarkar's* able article on Patanjali's age, in the same No. of the *Academy*, p. 59. The very passage adduced by Bhandarkar as pointing out King Push-

pamitra as a contemporary of Patanjali has been adduced already *twelve years ago* (1861), in my reply on Goldstücker's preface to his *Mânava Kalapasûtra*, *Indische Studien* V, 150, where the whole question on Patanjali's age is moreover treated in the sequel (to p. 169), with many important details left untouched by its recent investigator. I gave there the name of the king, in accordance with the Tibetan sources, as Pushyamitra, but Professor Bühler informs me that the Jains spell the name in their Mâgadhi-texts, Puppamitta, which gives Pushpamitra as the right form.

A. WEBER.

Berlin, Feb. 25, 1873.

Notes and Intelligence.

Hymnes Sanscrit, Persiens, Egyptiens, Assyriens et Chinois. Chi-King, ou Livre des Vers, traduit pour la première fois en français par G. Pauthier. Paris: Maisonneuve. The second volume of the *Bibliothèque Orientale* (a collection of the chefs-d'œuvre of Oriental literature) derives its sole scientific importance from translations of Egyptian and Assyrian hymns. Most of these have been hitherto completely unpublished. The triumphal hymns of Tutmes III., and of Ramses II., and a hymn to Osiris and Ra, are rendered by the late Vicomte de Rougé, some invocations by Chabas, hymns to the Sun by Lefébure, and the complaints of Isis and Nephthys by Horrack. The Assyrian portions are due to M. J. Oppert.

Dr. Geitler has recently published in the Bohemian language, a *Phonology of the ancient Bulgarian*, with relation to the Lithuanian.

Dr. F. Kielhorn, principal of the Deccan College at Poona, has just completed the second part of his translation of the *Paribhâshenduskhara*. The third and last part is expected to follow in about three months.

The Indian Antiquary.—A journal of Oriental Research in Archaeology, History, Literature, Languages, Philosophy, Religion, Folklore, &c. Edited by Jas. Burgess. Vol. I. Bombay. 1872.

On the completion of the first volume of Mr. James Burgess' *Indian Antiquary*, a monthly journal devoted to Oriental, and more especially Indian, research, which has already rendered good service in several branches of literary and antiquarian inquiry, a few remarks on the work it has hitherto done may not seem out of place in these columns devoted to literary and scientific criticism. When in the beginning of last year Mr. Burgess put forth the first number of his periodical, accompanied by a prospectus promising information on almost any subject that is likely to interest those who inquire into Indian antiquity, many must have given a hearty welcome and wished success to what bade fair to become a useful medium of communication between the Oriental scholars and archaeologists in the east and west. There can be no doubt that scholars in India especially had long felt the want of a record of this kind, ready to receive and at once publish, along with communications of higher pretensions, any observations or statements which, though unsuited to the journals of Asiatic societies and other institutions, might prove of interest or bring on discussions, and thus aid the progress of science.

It must now be satisfactory to Mr. Burgess, in glancing over the list of contents of his first volume, to have been able during the past year to avail himself of the services of so many of the best known scholars in India. Nor is it likely that any of his subscribers should feel disappointed at the result of the co-operation of so many able contributors. Those who make the ancient literature of India the object of their study cannot but have read with much interest the accounts given by Dr. G. Bühler of several rare works which he has had the good fortune of discovering during his recent official search for Sanskrit manuscripts, such as Kshemendra's *Vrihatkâtha*, Hemachandra's *Deśabhasa-sangraha* and others; or the papers of Messrs. A. Burnell, K. T. Telang, and Profs. Bhandarkar and Sashagiri Sâstri on various interesting questions of Sanskrit literature. Whilst the contributions of Messrs. Beames, Growse, and Hoernle throw some new light on the literature and philology of some of the northern vernaculars; Mr. R. C. Caldwell has given some specimens of Tamil popular poetry; and the Rev. F. Kittel has attempted to determine some Dravidian elements in Sanskrit, and has moreover given an account of a newly discovered Ancient Canarese Dictionary, by Manga Râja, which appears to be of considerable value. On Hindu folklore, also, there are some interesting communications by the editor, by Dr. Leitner, and Messrs. Damant and Benett.

It is, however, to archaeological, geographical and historical inquiries that most space has been allotted in the columns of this journal. The volume contains a number of copies of valuable inscriptions appertaining to various dynasties, with translations and remarks by Profs. Bhandarkar and Shankar Pandit, and Messrs. J. F. Fleet and B. L. Rice; and some inscriptions from Ceylon, with explanatory notes by Mr. Rhys Davids. Prof. Blochmann has contributed several biographical notices of grandees of the Mughul court, chiefly extracted from a Persian work, entitled *Madsir ul Umark*; and Bâbû Râjendralâl Mitra, Messrs.

Ramsay, Narasimmiyengar, Col. Mackenzie, and others have severally illustrated some points of historical or antiquarian interest. The editor has also printed an English translation, by the Rev. D. C. Boyd, of Prof. Weber's essay on the *Rāmāyana*, which has already been ably reviewed elsewhere by Mr. K. T. Telang, and which it would be interesting to see discussed by other Hindu scholars in the columns of this journal. It is to be hoped, in the interest of Oriental studies, that the existence of so useful a record as Mr. Burgess' *Indian Antiquary* has already proved to be may never be endangered by want of that encouragement and support to which it is fairly entitled.

J. EGGLING.

The current number of the Bengal Asiatic Society's journal contains a highly interesting and important essay, by Bábu Rájendralála Mitra, on the use of beef in Ancient India. The writer adduces abundant passages from Vedic texts and law-books as well as from later works which show clearly that, whatever may be the feelings of Hindus on this subject nowadays, beef was a staple article of food with their forefathers. "The idea of beef," remarks the Bábu, "the flesh of the earthly representative of the divine Bhagavatí as an article of food is so shocking to the Hindu, that thousands over thousands of the more orthodox among them never repeat the counterpart of the word in their vernaculars; and many and dire have been the sanguinary conflicts which the shedding of the blood of cows has caused in this country. And yet it would seem that there was a time when not only no compunctious visitings of conscience had a place in the mind of the people in slaughtering cattle; when not only the meat of that animal was actually esteemed a valuable aliment; when not only was it a mark of generous hospitality, as among the ancient Jews, to slaughter the 'fatted calf' in honour of respected guests, but when a supply of beef was deemed an absolute necessity by pious Hindus in their journey from this to another world, and a cow was invariably killed to be burnt with the dead. To Englishmen who are familiar with the present temper of the people on the subject, and to a great many of the natives themselves, this remark may sappeare quite startling; but the authorities on which it is founded are so authentic and incontrovertible that they cannot for a moment be gainsaid."

Bábú Rājendralāla Mitra has also issued the fifth fasciculus of his "Notices of Sanskrit Manuscripts," comprising Nos. 678-787. The manuscripts described in this part are most of them copies of philosophical (chiefly *Vedānta*) works and commentaries, and manuals of Vaidik and sectarian ritual. A rather curious compilation is noticed under No. 731: *Viśvakarmīya Śilpa*, a treatise on the manual arts, attributed to Viśvakarmā, the divine architect. The MS., which belongs to Bábú Rājendra, is said to have been copied from an old code in the library of the Rājā of Tanjore, which is written in the ancient Canarese character. Among the MSS. noticed is also an old, though incorrect, copy of the *Upagrantha-Sūtra* (No. 777), one of the ten Sūtras of the *Sāmaveda*, of which one MS. only (India Office 121) exists in Europe.

Contents of the Journals.

Journal Asiatique. January.—Buddhic studies; by M. Feer. [On "The Friend of Virtue" and "The Friendship of Virtue," with new texts.]—The actual metric system of Egypt; by Mahmoud Bey.—Miscellaneous. Notice on ancient formulæ of incantations, &c., in a language anterior to the Babylonian. [Contains a sketch of Accadian grammar. From its imperfection and errors it appears to have been written some years ago. The more correct account of the facts will be found in M. Lenormant's *Études accadiennes*. It is followed by a good and ingenious translation of a tablet of exorcisms (*W. A. T.* ii., 17, 18).]—Porter Smith on the *Materia Medica* and Natural History of China.

Revue archéologique. February.—The most ancient inscription in Assyrian; by M. Lenormant. [This is a Semitic inscription of an ancient Accadian king of Ur on a black stone. It is valuable as showing Semitic influence in Babylonia at an earlier period than has hitherto been suspected.]

Zeitschrift für deutsche Philologie. IV. 4. Halle.—Ueber die scheinbare Verwechselung zwischen Nominativ und Accusativ; L. Tobler. [Explained as the result partly of phonetic, partly of syntactical laws. The endings become confused and partially levelled from phonetic decay, and the process is further assisted by various syntactical constructions which admit the use of nominative or accusative indifferently. The illustrations are drawn chiefly from the German dialects of Switzerland, with occasional reference to English and French.]—Bemerkungen zum Redentiner Osterspiele; Fr. Drosihn. [Corrections of the text, and explanation of difficult passages.]—Zur livländischen Reimchronik; Leo Meyer. [Remarks on the MSS., with corrections of the printed texts, and dissertations on special words and phrases.]—Zur älteren Edda; J. Zupitza. [A series of explanations and emendations, of which the most important is the reading *kendi* (= *wies*) for *kundi* in Sgkv. 3, 3, 6: *ok ʀʀ akunni*.]

The Indian Antiquary, ed. J. Burgess. Part XII. Bombay, December, 1872.—On a Copperplate Grant from Balasore; by J. Beames.

[This plate is in the possession of the Bhuyāns, a family of Zamindars at Garhpadā, about fifteen miles north of Balasore. It records a Grant by Rājā Purushottama Deva, King of Orissa, and is dated in the fifth year of the king's reign (A.D. 1483).]—On the derivation of some peculiar Gaurian verbs; by the Rev. A. F. R. Hoernle. [By the term *Gaurian* the northern vernaculars are designated; the paper treats of a class of verbs in these dialects with a special base derived from the past participle.]—The Merkara Plates; text and translation by B. L. Rice, with remarks by the editor and R. G. Bhandarkar. [An important inscription of the Chera dynasty, dated in 388, probably of the Saka era—A.D. 466.]—The Lady and the Dove: a Bengali song, composed by a Hindu female; by Rev. J. M. Mitchell. [Text and translation in English verse.]—Facsimile of a Persian map of the world, with an English translation; by E. Rehatsek. [The original belongs to a Muhammadan at Junner, in the Bombay presidency.]—On some Koch words in Mr. Damant's article on the Palis of Dinagpur; by J. Beames.—Archæology in the Krishna District. [Extracts from a report by the late J. A. C. Boswell, continued.]—Three Maisur Copper Grants; by V. N. Narasimmiyengar. [Text and translations of some forged Copper Grants purporting to have been executed in the reign of King Janamejaya at the beginning of the Kaliyug.]—Dr. Bühler's Report on Sanskrit MSS. in Gujarat. [Dr. B. informs us that as soon as the fourth part of his catalogue will have been issued, supplementary lists will be printed; and that considerable progress has been made in cataloging Jaina libraries. The number of MSS. purchased during the year amounts to 421, among which there are several valuable works. The collection of Jaina books at Bombay is said to be now larger than any other public collection: there are copies of nearly all the sacred works and commentaries, both old and new, on most of them.]—Correspondence.

New Publications.

- BAECHTHOLD, J. Deutsche Handschriften aus dem Britischen Museum. In Auszügen. Schaffhausen: Baader.
- CHANDRA SUTRA OF PINGALA ACHARYA. With Commentary of Ḥaṣyaudha. Ed. by Pandita Visvanatha Sastri. Fasc. ii. (Bibliotheca Indica, No. 270.) Trübner.
- CHĀTUVAGA CHINTAMANI. By Hemadri. Ed. by Pandita Bhurātachandra Siromani. Part II. Dankhanda. Fasc. vi. (Bibliotheca Indica, No. 261.) Trübner.
- GERBER, G. Die Sprache als Kunst. 2 Bd. 1 Hlfte. Bromberg: Mittler.
- LE BERRE (le p.) Grammaire de la langue Ponguée (parlée au Gabon en Sénégal). Paris: Maisonneuve.
- LENORMANT, F. Le Déluge et l'épopée Babylonienne. (Extrait du Correspondant.) Paris: Maisonneuve.
- LIEVEN, H. Die Consecutio temporum bei Cicero. Riga: Kymmell.
- MAACK, Dr. Die Entzifferung des Etruskischen und deren Bedeutung für nordische Archäologie u. für die Urgeschichte Europas. Hamburg: Meissner.
- MANLAVI ABDUR RAHIM. Index of Names of Persons and Geographical names occurring in the Badshahnamah. (Bibliotheca Indica, No. 260.) Trübner.
- P. OVIDII NASONIS CARMINA. Ed. by Reise. Vol. 2, Metamorphoses. Leipzig: Tauchnitz.
- SAN-TSEU-KING, ou le livre des trois mots. Traduis du Chinois par Stanislas Julien. (Turretinis Series, *Ban-Zai-San*, ii. Fasc.) Bâle: Georg.
- SCHLEICHER, A. Die Darwinsche Theorie u. die Sprachwissenschaft. Weimar: Böhlau.
- SI-SIANG-KI, ou l'histoire du pavillon d'Occident. Comédie chinoise, en 16 actes. Traduit du Chinois par Stanislas Julien. (Turretinis Series *Atsume Gusa*. Fasc. iv. and v.) Bâle: Georg.
- TAITTIRIYA PRATISAKHYA. With Commentary called *Tribhashyavatna*. Ed. by Rajadala Mitsa. Fasc. iii. (Bibliotheca Indica, No. 259.) Trübner.

ERRATA IN No. 67.

- Page 84 (b) 6 lines from bottom for "Reubens" read "Rubens."
 " " " " "Sneyders" read "Snyders."
 " 85 (a) 25th line from top for "3 Bde" read "3rd Band."
 " 87, col. 1, line 9, dele "which."
 " " " 2, " 26, read "Gen. ii. 1-3."
 " 89, " 1, " 14, for "Devotion" read "Doctrine."
 " " " 16, for "Ahmed" read "Ameer Ali."
 " 93 (b) 24th line from top for "Langerhaus" read "Langerhans."
 " 94 " 30th " " for "fronded" read "founded."
 " " 36th " " for "*Composita*" read "*Compositae*."
 " " 38th " " for "*Legumiosae*" read "*Leguminosae*."
 " " 44th " " for "35th" read 55th."
 " 97 " 32nd " " for "begun" read "began."
 " 99 " 16th " " bottom for "second" read "common."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 68.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Tuesday, April 1, and Advertisements should be sent in by March 28.

UNIVERSITY OF LONDON.

Notice is hereby given, that on Wednesday, 30th of April next, the Senate will proceed to elect Examiners in the following departments:—

Examinerships. ARTS AND SCIENCE.	Salaries (Each.)	Present Examiners.
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Two in <i>Mathematics and Natural Philosophy</i>	£200	{ Prof. H. J. S. Smith, LL.D., F.R.S. Prof. Sylvester, LL.D., F.R.S.
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The Examiners above named are re-eligible, and intend to offer themselves for re-election.

Candidates must send in their names to the Registrar, with any attestation of their qualifications they may think desirable, on or before Tuesday, March 25th. It is particularly desired by the Senate that no personal application of any kind be made to its individual Members.

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No. 69.]

REGISTERED FOR

TUESDAY, APRIL 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Rousseau. By John Morley. 2 vols. Chapman and Hall. 1873.

THIS is a much more serious attempt to meet a much more serious want than that to which the same author's companion volume on Voltaire was addressed. Voltaire's character can be understood without an interpreter: the story of his life has been told repeatedly; the substance of his most influential writings has passed long since into commonplace; the fascinating charm of his style may be acknowledged, but scarcely reproduced; and when all is said, we come back to the first and obvious conception of him as the brilliant embodiment of the wit and reason of an age that was sceptical *de gaieté de cœur*. With Rousseau the case is in every respect different. The influence, direct and indirect, of his writings is still being felt, while the writings themselves are so imperfectly known that its original source is often mistaken, and its future results miscalculated in consequence. His style, admirable as it is at its best, is weighted with matter harder to appreciate and easier to dislike than Voltaire's; and at the same time the most careful criticism of his works must be incomplete if it does not include an account of the incomprehensible personality that colours them so strongly; while such an account is scarcely to be met with in ordinary biographies, where the inner nature of the man himself is obscured to us by the mass of ancient scandal and modern controversy connected with nearly every act of his life. Mr. Morley has undertaken to make Rousseau better known on every side; as an original thinker, as a man of letters and genius, as a leader of thought—of thought promptly translated into action—and as a psychological problem; and as the task is proved to be possible, to candour and patience, its importance and use become increasingly apparent. With a wise discretion he declines to encumber the biographical portions with interminable attempts to reconcile the dates and other details given in the *Confessions*, with each other and with the statements of independent witnesses, or to determine precisely the rights and wrongs of Rousseau in each fresh quarrel with his friends. Accuracy on such points, even if it were attainable, would not substantially affect the general view of his character, for all his feuds were much alike in

origin, and their number makes it impossible to suppose him always the victim of injustice; while in other matters his own statement that he had once done or felt something could never be entirely unfounded, because living, as he did, in the impression of the moment, if he had not done or felt it at the time specified, it was yet as much a reality to him afterwards in imagination as it could be to saner men in memory. The only objection to this manner of treatment is that, while it preserves the general outlines faithfully, any particular inference suffers from the uncertainty of the fact on which it is based. Thus, for instance, Mr. Morley admits that Rousseau's residence at Les Charmettes may have lasted only a year and a half or a year, instead of four or five as he himself says, only adding that "a year may set a deep mark on a man." But it seems more plausible to suppose that Rousseau's character led him to dwell with disproportionate emphasis on an episode that was thoroughly congenial to his imagination, than that he should have been permanently influenced by a short and accidental relation which would only have been possible or significant to such a character as his.

In general we should say that Mr. Morley allows rather too much for the *milieu* and the effect of education and circumstance, and too little for that of native eccentricity of disposition and the congenital moral twist which, since it developed into actual insanity, we have neither motive nor reason for denying. Mr. Morley thinks this too easy an explanation of all that is abnormal in Rousseau's mental state, and is almost inclined to connect his mission as the champion of the condemned and oppressed with the existence of a sordid and contemptible side to his own character; but to remind us that the man whose flashes of divine inspiration set all Europe aflame was also the contented daily associate of Thérèse Le Vasseur, is just as likely to weaken our faith in the all-sufficiency of genius as to enlarge our charitable indulgence for the few common-place men who need as much as Rousseau. The bluntness of moral perception which made Rousseau indifferent to vulgarity in those nearest to him may help to account for what is worst in his writings, but has no necessary connection with what is good in his character. That there *was* good in his character Mr. Morley establishes by considerations which are both new and valuable. His happiest moments

were those passed in innocent idleness alone with nature or her uncivilized children; he had none of the vices that demand for their gratification the pre-existence of a complicated social organization; and it was this singularity—the fact that he did not want, and could not by any means learn how to occupy, a brilliant position in the society that he was to help subvert—that gave his paradoxes the earnestness and force of truth, and leaves a kernel of sincerity even to his affectation. His preference for homeliness and his power of frankly accepting life under quite irrational conditions, so long as the sensation of the moment was not irksome, were those of a child rather than a philosopher; but the vividness of his ideas stood, for himself and others, in the place of logic. As he could only think what he had previously felt, there was a strong element of arbitrariness, as M. Saint Marc Girardin pointed out, in the thoughts which proved so captivating to his contemporaries; but translated into theory, what was eccentric became original, and the fact that Rousseau could be content with a life like that of the people led to its being for the first time revealed to many that the people *had* a life, and that it was of some importance whether they were content with it or not. His morbid jealousy of patronage or dictation may be explained as the confused and querulous expression of just self-assertion; he says in the *Contrat Social*: “Toutes mes idées se tiennent, mais je ne saurais les exposer toutes à la fois,” and what is doubtful if asserted of his ideas is certainly true of his sentiments; the same instinctive misanthropy which made him an impossible friend and an execrable lover gave him a position outside the existing social order, from whence he could compass its destruction in the name of fraternal charity. If he had been less completely out of sympathy with the tastes and prejudices of the old world, even his potent imagination might have failed to contemplate such a complete reversal of them all as was realized, first in his writings, and then in the acts of his political disciples.

Still we cannot admit either that his genius partook of insanity or that the hallucinations which destroyed his private peace were merely the effects of ill-temper and bodily ill-health. Mr. Morley admits that in his quarrel with Hume the limits of sanity are clearly overpassed; but if it is madness to have the mind occupied in succession with contradictory impressions, some of which have no counterpart in reality, certainly Rousseau was not always sane during the latter part of his stay at the Hermitage. The patience of Saint Lambert, Madame d'Épinay, Grimm, and Didérot lasted longer than that of his English friends, because, knowing him better, they had had more practice in indulgence; but it was quite as severely tried. His only real grievance was that his friends, especially Didérot, insisted on knowing what was good for him better than he did himself, and sometimes conspired to benefit him after their own fashion instead of leaving him alone after his: Hume's first offence was of the same kind—having allowed Mr. Davenport to try and cheat his guest into paying less than its full cost for a post-chaise. In all practical matters Rousseau's intelligence was as weak as his impulses were strong, and if he felt himself hampered in the free development of the latter, he was never able to think of any other way of escape than by physically running away, or, if that was impossible, breaking out into impotent and venomous complaints. Mr. Morley is not one of Rousseau's apologists, but he points out both that the author of the *Discours sur l'Inégalité* had earned a right to live as he pleased, and that there was a certain fitness in his choosing to live by copying music. His comments on Rousseau's explanation of his own natural ingratitude suggest a general consideration that may help to extenuate the moral delinquencies of other

men of genius besides Rousseau. The emotions cannot be commanded at will, and when Rousseau was guilty of gross ingratitude to a former benefactor, the reason simply was that he no longer felt grateful; the benefit and the feeling it had excited at the time were past and gone, and his consciousness was filled with fresh and quite different impressions. If the claims of his own personality had been less exacting, he might have deferred so far to popular conceptions of what is becoming as to affect the virtues he had not got; but then he would not have been the Rousseau of the *Confessions*. Such peculiarities as his insensibility to past kindness are extremely unamiable, but from the moral point of view there is a distinction between blank incapacity to see a duty or to feel the justice of another person's claims, and conscious, voluntary disregard of them when recognized. Just as his resolve to be himself made him most conspicuously the man of his age, his vanity led him into candour which, in more ways than one, has had the effect of modesty: he not only makes the worst of his character by accepting and identifying himself with passing thoughts (such as his inheritance of Claude Anet's wardrobe) which, though they might occur to other men, would be thrown off at once as a vagary of physical association or suggestion not affecting the real self, but the very completeness of his absorption in the impression of the hour in its bearing on himself prevented his estimating the effects he was meanwhile producing upon others, and we should never have learnt from his writings, what is nevertheless a well-established fact, that, in his lucid intervals, people who did not send him game or prepay their letters found him an agreeable and amiable companion. Mr. Morley does not, of course, offer a cut and dried theory of so paradoxical a subject, but without omitting anything essential he has harmonized the incongruous features into as intelligible a portrait as fidelity to his perplexing original would allow.

With respect to the Discourses on the Influence of the Sciences, on Inequality, and the *Contrat Social*, the most useful thing to be done was to give an account of their substance, for they answer themselves to readers of the present day, while they have far too much historical importance to be neglected with impunity. Mr. Morley perhaps attaches too much weight to Rousseau's account of his studies at Les Charmettes and the singular plan on which he conducted his education, but taken merely as a statement that he was incapable of criticising the conclusions or reasoning from the data of other writers, it gives a true representation of his habits of thought both then and later. His reasoning consisted in a series of intuitions joined together with the sophistical ingenuity of passion, and no amount of instruction or method could have taught him to proceed differently. In judging his writings, therefore, the objective value of his conclusions is the only point to be considered, except so far as he is responsible for introducing the passion for neat paradox, in lieu of the neat truism of Voltairian philosophers, which has had so much influence on later French speculation. By confounding in his attacks on civilization the graces and the admitted defects of the existing social order, he struck the imagination, and even when his generalities were as unsound as those by which the *status quo* could be defended, they were not so easily refuted by an appeal to experience. Nothing can be easier than to show the historical unreality, or rather impossibility, of the “state of Nature” which he supposes, but the praise of such a state was the strongest blame of modern art and corruption, and if society has never been entirely self-satisfied since he wrote, his blunderingly consistent attacks on conventionality and luxury must have a large share of the credit. But in the *Contrat Social* he had got much further than this: we hear comparatively little of the

state of nature, and in fact Mr. Morley seems to do rather less than justice to his second thoughts by taking for granted that he supposed his imaginary contract to have been entered into by persons living in that imaginary state. In the later work he admits, with the instinct which so often makes him unconsciously profound, "la famille est donc, si l'on veut, le premier modèle des sociétés politiques"—a concession to history which neutralizes the effect of his introductory metaphysical flourish, "Man is born free, yet is everywhere in chains." Obviously it is not "Man," but babies that are born, who grow into men under conditions which do not, as a rule, fit them to claim at maturity the freedom which cannot be denied to those able to take it. But the significance of Rousseau's new gospel of the sovereignty of the people was independent of historical theories respecting the origin of political societies and the lawful basis of governments. It lay rather in his present and vivid belief that every state still was, actually and necessarily, an association of beings of the same kind, maintained with the consent, tacit or expressed, of all its members. Revolutionary democracy was implied in the conception of Louis XV., a duke, a philosopher, and a starving peasant as parties to the same act of acquiescence; but history promptly put the theorist in the right by proving that the peasant could break the compact when he chose as easily as the king. Mr. Morley criticises the destructive, anarchic tendencies of the doctrine, but the most stable governments are not those which are independent of the consent of the governed, for there are none such, but those in which the consent of the governed is most unreserved and unanimous. To secure the consent is a matter of art rather than science, and Rousseau has little that is valuable to say about the organization of society; but he was the first to penetrate below the surface of actual or possible social forms to the essential principle of association, and though the right of the strongest to rule had often been maintained before, he threw an entirely new light upon the question who was the strongest. He does not distinguish clearly between the sovereignty of the people and respect for individual freedom; but he at least sees farther into the matter than Voltaire, who thought only of the latter. Even in a passage—which Mr. Morley condemns as arithmetical quibbling—in praise of small states, he is only forestalling Mill and De Tocqueville on the tyranny of democracies, though he failed to allow for the influence of tradition in forbidding coercion, except by means of public opinion. It would perhaps have enlarged the scope of the work unduly, but we should have been glad if, after tracing Rousseau's obligations to Hobbes, Mr. Morley had devoted a chapter, instead of two or three pages, to indicating the extent of his influence on political speculation in England as compared with France, and the point at which the current diverged into the separate channels of political revolution and socialistic reconstruction.

A similar distinction must be drawn between the two lines or branches of his literary descendants. In the chapter on *La Nouvelle Héloïse* Mr. Morley accounts for the curious fact that Châteaubriand, Lamartine, and the royalist-religious reaction generally drew its inspiration from Rousseau by the presence of a constructive side in his revolutionary sentimentalism. It is true that he was moral compared with Crébillon and Diderot, pious compared with d'Holbach and Hébert; yet at the time of its appearance *La Nouvelle Héloïse*, in spite of its praise of the family and its pictures of pastoral felicity, was not considered an edifying work; like *Le Contrat Social*, it was too ingenious to be safe; and though Châteaubriand only borrowed its rhetorical fervour, and turned his sophistical skill into quite unexceptionable channels, the next generation relapsed into utter law-

lessness. Rousseau's *Héloïse* and *Emile* are a part of the history of Romanticism from its first outbursts after the restoration of the Bourbons to its latest English echoes. Of *Emile* there is not much that is new to be said. Mr. Morley "improves" the Savoyard Vicar in the interests of Positivism; but in this even more than in the other works the general principles and practical recommendations are of much less value than isolated remarks; and he might have given Rousseau credit for not a few phrases which, with a more consistent thinker, would be unmistakable indications of *positivité*. To those who know little or nothing of Rousseau at first hand, Mr. Morley's full and accurate account of the man and his writings will be invaluable. His most zealous admirers might perhaps object that his moments of profound insight and the beneficial effects of his influence are not rated at their highest value; but even they will be grateful for a candid and discriminating appreciation of an author who greatly needed an interpreter. EDITH SIMCOX.

Hilario Ascasubi. Obras completas.—Primer Vólvmen, Santos Vega, ó los Mellizos de la Flor, Rasgos Dramáticos de la Vida del Gaucho en las Campañas y praderas de la Republica Argentina (1778 a 1808). Segundo Vólvmen (de 1853 a 1865). Aniceto el Gallo, y otras Poesias Ineditas. Tercer Vólvmen (de 1839 a 1851). Paulino Lucero, ó los Gauchos del Rio de la Plata. Paris, in 8vo, 1872. Imprenta de Paul Dupont.

OF all the Argentine poets Don Hilario Ascasubi is certainly the most popular, and I may add the most worthy of being known. During the forty years and more that he has written, his reputation has grown and spread increasingly; his patriotic poems, *cañas, cielos*, are still as generally sung in Buenos-Ayres as at the time of their first appearance. The only edition in which they have been hitherto collected, and that in an incomplete manner,* has long been exhausted, and I do not like to mention the exorbitant price I was obliged to give for a copy of it in Montevideo. The new one forms three volumes in 8vo, the first of which contains a long poem, *Santos Vega; or, The Twins of Flower-Farm*. The second is filled by the *Songs* published in 1853, and the third by several articles in prose and in verse selected from a satirical journal, *El Gallo* (The Cock), where they appeared about the years 1853-1858.

It is a common fault with most of the Spanish-American poets to want, I do not say political, but *poetical* nationality. But for the accident of their birth and the uses of geographical and botanical names such as *Uruguay, Buenos-Ayres, chirimoyo*, for *Tage, Cadiz*, and *jásmín*, they would be true Spanish writers, not American ones, so admirably do they contrive to forget the manners and the tongue of their country. With M. Ascasubi no one can complain of a want of originality. From the very first verse of his poems one feels transported in a world wholly *un-European*, but for all that entirely the reverse of conventional. It lives a life of its own, is moved and led by impulses and motives of its own, and even speaks a tongue of its own, that which we hear spoken not only by the Pampa farmers and *peons*, but also with more elegance and an attempt at classicism by the more refined denizens of Buenos-Ayres and Montevideo. There are some phonetical alterations in it, some substitutes of new meanings and new words for old meanings and old words, some highly flavoured idioms which are calculated to puzzle at first the reader not previously acquainted with them: so great indeed and so many are its peculiarities that the purists of modern Spain cry out at its barbarisms, unjustly as I think. This Argentine vernacular is a form of Spanish other than the Spanish of Spain, but as legitimately

* Under the title of *Trovas de Paulino Lucero*. Buenos-Ayres, 1852. 2 vols. in 8vo.

drawn from the tongue of Ercilla and Cervantes as any dialect spoken nowadays from Algeiras to St. Sebastian. Only since the time it went out to America it had such new ideas to embody, such new sensations to express, such new aspects of scenery to describe, such new manners and customs to reflect, that it had to throw off many of its old habits and to develop itself into new shapes it would never have assumed in the mother country. Such as it is now, it has been made to smell so strongly of the soil upon which it grew as to recall instantly to the mind by the picturesqueness of the words the picturesqueness of scenes seen long ago and never to be forgotten by any one who has looked upon them.

Nowhere can this special form of Spanish be so perfectly studied as in M. Ascasubi's works. First as an officer in the navy, and later as officer in the army, M. Ascasubi from the time he was a lad of twelve or thirteen was brought into contact with the people whose language he writes and whose customs he pictures. He finally so identified himself with the Gauchos that he became himself a Gaucho. He it is who, under the names of Jacinto Amores, Ramon Contreras, Ruperto Flores, Paulino Lucero, narrates in the *Trovas* the various episodes of the great siege of Montevideo by Juan-Manuel Rosas and Oribe, celebrates the exploits of the *Orientales* chiefs, Rivera, Pacheco y Obes, Lavalle, even Garibaldi and his Italian guerillas, then in the service of the Republic of Uruguay. He again it is who, under the name of Aniceto el Gallo, pursues with his sarcasms Don Justo Jose de Urquiza, Rosas' conqueror, and all the statesmen who in 1853 attempted to rob Buenos-Ayres of its title of capital of the Argentine Republic. He it was lastly who, assuming the name of *Santos Vega el Payador* (The Improvisatore), tells the adventures of the Twins of Flower-Farm, and describes the habits of the Gauchos.

It is especially in this last poem that one can admire the many and various talents which have won for the works of M. Ascasubi their well-merited popularity. This poem fills as many as five hundred pages, and contains at least ten thousand lines. Thus when I opened it it was with some feeling of hesitation; but after reading the first part I got so interested that I could not help reading the whole from end to end without interruption. It is the history of twins, one of whom becomes a rich farmer and the other a bandit, from their birth until the death of the bandit. Round these two main personages are admirably grouped the other numerous characters of the Argentine society of the last century: the titled colonist, who lives in his *hacienda* like a prince in the midst of his subjects, his wife, their son devoted to the Church from his childhood, all three full of *bonhomie*, and uniting to their manners of *grands seigneurs* and Spaniards a great benevolence and affection for all the people of their household, whatever they may be; the young girl of the Pampas Azucena and her Gaucho lover; an old judge crammed with Latin, and an old rogue of a *pulpero*; a European soldier, bragging and boorish; and lastly, as a contrast, a Gaucho of our own time and his wife, to whom old Santos Vega is supposed to tell of the Gauchos of the past. Each of these personages speaks the language suited to his character with so much spirit that often in reading their words I fancied I was listening again to fragments of conversation heard long since in the same country. Once Lafontaine was asked how he managed to attribute to the creature-heroes of his fables language so appropriated to the nature and habits of each. "Oh!" said the *bonhomme*, "I put myself into their skins, that is all." M. Ascasubi has found out how to put himself into the skins of his personages. Those who wish to obtain an idea of the rural life of Rio de la Plata without leaving their arm-chair have but to read Santos Vega: as they close the book they will

know it as it is, or rather as it was some thirty years ago. European immigration, the innovations of high roads and railways, and above all the long wars, both foreign and civil, which have passed over the country since the time when M. Ascasubi's heroes lived, have deeply altered the race and changed its customs. The Gauchos are disappearing as the trappers and Indians of Cooper have disappeared. Fifty years hence they will be a type entirely foreign to the country which still owns them at this moment, and Santos Vega appearing in the streets of Buenos-Ayres or Córdoba will produce the same effect as if Leatherstocking were to stalk through New York or Albany. Thus the work of M. Ascasubi, besides its poetic merit, is an historical document of the highest importance; it contains the picture of the manners of the heroic age, or that which an American writer ingeniously named *the homeric antecedents of the Argentine nation*. The historians of the future will find in his poems the portrait admirably drawn of an extinguished race, whose faults are often exaggerated, but whose noble and generous qualities cannot be too highly praised.

G. MASPERO.

THE NUT-BROWN MAID.

To the Editor of the ACADEMY.

SIR,—I venture to trouble you with a suggestion as to the proper way of understanding some parts of the beautiful old ballad, "The Nut-brown Maid." The point is how the poem is to be distributed among the interlocutors, and whether the poet speaks in his own person. The date of the "Nut-brown Maid" is uncertain. In Prior (see below) it is titled "A Poem Written Three Hundred Years Since," i.e. in 1418. This is probably too early; but on the other hand the poem seems older than the oldest copies, and may have been corrupted by oral recital. It was first printed in *Arnold's Chronicle*, a book supposed to be of date about 1502. A MS. belonging to Balliol College contains *inter alia* a copy of the poem, at the end of which is added, 'Explicit, quod Richard Hille,' of about the same date, but not exhibiting so good a text. The text of the Balliol MS. will be found reprinted in Messrs. Hales and Furnivall's edition of Bishop Percy's Folio MS., vol. 3. Prior, in his poems, first published in 1718, prefixes to "Henry and Emma" a fairly good version of the ballad, minus the last stanza. According to Bishop Percy (*Reliques*, vol. ii.), Prior found this in the *Muses' Mercury* for June, 1707, where the poem was first revived, but which I have not seen. "Henry and Emma" is a half-story, half-dialogue, founded on the "Nut-brown Maid," of which it paraphrases parts. Regarded as an imitation of Dryden's Fables, it displays great rhetorical force and dexterity of verse; but Prior's couplets and triplets fall very frigid after the simple directness of the older poem. One line survives, a little altered, as a familiar quotation; "fine by degrees, and beautifully less:" which is said of a lady's waist. In Percy's Folio MS. a very incorrect copy appears. In Chalmers' Johnson's *Poets*, 1810, vol. x., among Prior's works the "Nut-brown Maid," with the last verse, is prefixed to "Henry and Emma." And lately Mr. Skeat has given the poem in his excellent *Specimens of English Poetry*, from Arnold's text, with variants, chiefly from the Balliol MS.

Now how have these various editors understood the twofold division of speakers? Arnold's is the best text. Where Hill varies from him, it is upon the whole for the worse. Percy's version is wretchedly debased. The copies included in Prior's works do not seem to have any independent tradition. Arnold's original edition I have not seen; but in Douce's reprint, which I presume to be made *litteratim*, the poem is given in eight-line stanzas, without farther divisions of any kind. The best text therefore leaves us to allot the parts at our discretion. The Balliol MS. marks the interlocution in the margin, beginning at st. 4, where he has "Puella," to whom "Squire" replies. St. 15, 17, 18, 23, 24, 26, 27, 30, have no mark of speaker. Apparently the writer considers that the first three stanzas and the last belong to the poet. But he may have written in these marginalia carelessly as he went along, considering the

want of uniformity with which they are employed. In Prior, ed. 1718, "Man" and "Woman" are distinguished, the man beginning at

"I am the knyght, I cum be nyght."

After this the verses are given to Man and Woman alternately, the man concluding with

"Thus have ye wone an Erlic's Son, And not a banishyd man."

So that he seems to divide as Hill does. In Chalmers the stanzas are marked *ab initio* "A" and "B" alternately, which I conceive to be the right way. Mr. Skeat gives the introduction, *i.e.* all down to "I am the knyght," to the poet, and I presume the conclusion also.

But it seems to me that the proper way to understand the poem is this: that it is a dialogue *ab initio* between two persons, male and female, who plead the cause of their respective sexes. The speeches of either end all through with the words "banished man" and "alone," the rest of the lines being modified according to the context. The first speaker (the man) begins with the familiar complaint of the faithlessness of woman. In stanza 2 the woman allows this to be a common accusation, but pleads instances on the other side, and notably the "nut-brown maid" (as if this had been a well-known name from some previous ballad or the like):

"I say not nay, but that all day it is bothe writ and sayde
That womans fayth, is as who saythe, all vterly decayed;
But neuertheless, right good wittes in this case might be layde
That they loue trewe, and contynew; reorde the nutbrowne maide,
Whiche from her loue, whan, her to proue, he cam to make his mone,
Wolde not departe, for in her herte she lound but hym allone."*

"I say not nay" is surely the answer of a second speaker, allowing that there is something in what has been said, though it can be refuted; and so below, in stanza 12, the Nut-brown maid assents to her lover's statement by saying—

"I thinke not nay, but as ye saye, it is noo maydens lore."

The first speaker then answers; very well; suppose we assume the persons of these two, the Nut-brown maid and her suitor, and speak for them:—

"Than betwene vs lete vs discusse, what was all the maner
Be-twene them too; we wyl also telle all the peyne in-fere
That she was in; now I begynne, soo that ye me answere.
Wherefore alle ye, that present be, I pray you geue an care:—
I am the knyght, I cum be nyght, as secret as I can,
Sayng; 'Alas, thus stondyth the case, I am a bannished man.'"

To which the lady answers: "I accept the proposal, and will speak for the Nut-brown maid:—

"And I, your wylle for to fulfille, in this wyl not refuse,
Trusting to shewe, in wordis fewe, that men haue an ille vse
To ther owne shame, wyemen to blame, and causeles them accuse;
Therefore to you, I answere now, alle wyemen to excuse:—
'Myn owne hert dere, with you what chiere? I prey you telle anoon,
For in my mynde, of all mankynde, I loue but you allon.'"

After this the dialogue goes on regularly till the last stanza, 30, which is the speech of the female speaker after the conclusion of the imaginary dialogue:—

"Here may ye see that wyemen be in loue meke, kinde, and stable,
Late never man repreue them than, or calle them variable;
But rather prey god that we may to them be comfortable,
Which somtyme prouyth suche as he loueth, yf they be charitable;
For sith men wolde that wyemen sholde be meke to them echeon,
Moche more ought they to god obey, and serve but hym allone."

The composer, therefore, never appears at all in his own person.

There is but one difficulty on this hypothesis, and that is the words of the first line,

"Be it right or wrong, these men among, on women do complaine."

"These" men comes rather awkwardly from the mouth of one who is speaking for the male sex. As none of the texts are very much to be relied on, could we read "we" or "wee" men? The difference in

* The quotations are from Mr. Skeat's text, omitting the italics, etc., as beside the present purpose.

old writing would be little or nothing. Not impossible "these" might be the mistake of some one who conceived the poem to be a woman's work. Bishop Percy in a MS. note in his folio suggested this, and Mr. Skeat mentions it as not unlikely. But Percy's conjecture seems simply to rest on the very corrupt reading of the last stanza he found in his MS.; and I cannot say that I see any trace of a female hand in the poem, my supposition of a female interlocutor being once allowed. Would a woman author have made the heroine such a very pliable Griselda?

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J. PURVES.

THE GAELIC SOCIETY OF INVERNESS.

THERE has been started two years ago in the Highlands of Scotland a literary society whose exertions deserve to be noticed and encouraged, the "Comunn Gailic Inbhir-Nis." Although a *Commune* by its name, it has nothing in common with the Paris Commune, and it is of a merely literary and conservative character. The objects of the society are clearly exposed by their constitution: "The objects of the society are the perfecting of the members in the use of the Gaelic language; the cultivation of the language, poetry, and music of the Scottish Highlands; the rescuing from oblivion of Celtic poetry, traditions, legends, books, and manuscripts; the establishing in Inverness of a library, to consist of books and manuscripts, in whatever language, bearing upon the genius, the literature, the history, the antiquities, and the material interests of the Highlands and Highland people; the vindication of the rights and character of the Gaelic people; and, generally, the furtherance of their interests whether at home or abroad."

That is a wide and promising field, and it is very satisfactory to see the Gaels of Scotland take into their hands the cause of their too long neglected literature and history. It is true that the Gaelic language may die one day or other. In our modern Europe, where no nation can any more live isolated, it is the unavoidable fate of all nationalities which have no political existence and whose representatives do not number by millions. Yet it is the duty of those whom nature has made heirs to an ancient and glorious history, and who are the last offsprings of a noble race, to cling to what is their nearest fatherland. With that feeling of pious duty to the past the members of the Gaelic Society have gone to work. They hold meetings, where papers are read and lectures delivered, and the business is carried on in Gaelic every alternate night. They have also an annual meeting, when competitions for prizes take place in pipe and other Highland music, and in Gaelic poetry. Lastly, they publish transactions.

The first volume has just been published (*Transactions of the Gaelic Society of Inverness*. Vol. i. Year 1871-1872. Inverness: Printed for the Society by William Mackay. XV.—127 p. in 8.) It has for its motto the old saying: *Clann nuan Gaidheil ri gaillean a'cheile*, "Clan of the Gaels with shoulder to shoulder." It contains the constitution and the history of the society, the proceedings of the first annual assembly, papers and pieces of Gaelic poetry which have been read in the ordinary meetings. Some of the papers and addresses are in Gaelic. On p. 110 will be found a Gaelic translation of *God save the Queen* by the society's bard, Mr. Angus Macdonald, which was sung at the first annual meeting, and we willingly believe that "the surprise was pleasing and the effect grand." The chief papers are the following:—Local Topography, by Alexander Mackenzie; the Clan System, by John Murdoch; the Legends of Glen Urquhart, by William Mackay (in Gaelic); the Forty-Five, by Charles Mackay (in Gaelic); Survey of the Celtic Language, by the Rev. William Ross; the Highland Clearances, by John Macdonald; Notes on the History of the Gaels, by Lachlan Macbean; Nationality, by Professor Blackie. In perusing these papers we have been surprised to see how little known in the upper north are the works of the continental Celtic scholars. Zeuss' masterly work, the *Grammatica Celtica*, which is the very foundation-stone of all Celtic philological researches, is mentioned only by the Rev. William Ross, who pays a pious tribute to the father of Celtic philology. Mr. William Ross is well informed, and we are sorry to miss in his "survey" Chevalier Nigra's publications. But it would be unfair to criticise too severely the new-born and yet so promising society. We shall only ex-

press the wish that in their future volumes more room should be given to original texts, *i.e.*, popular music as well as historical documents, collections of proverbs as well as unedited literary works, &c. We know it is one of the objects of the society; and we have their promise in the introduction: "The Highlands owe it to the world of letters and philosophy that whatever the Gaelic language, traditions, legends, poetry, sentiments, and philosophy contain which is of value should be preserved by those who know them, and handed over as valuable contributions to the stock of materials out of which human learning must be built up." H. GAIDOZ.

Notes and Intelligence.

In reference to a statement in a recent number implying that Dr. Newman had for some time been editor of the liberal Catholic journal called the *Rambler*, which was started five-and-twenty years ago, the Rev. J. M. Capes writes to us that Dr. Newman never edited the *Rambler*, and though an occasional contributor to its pages, never identified himself with its opinions. Mr. Capes remained its editor and proprietor for several years, when he transferred it to Sir John (now Lord) Acton, by whom it was transformed into the *Home and Foreign Review*, which lived a few years, and was finally crushed by the condemnation of the English Roman Catholic prelates. The *Rambler* early found itself in antagonism with some of the Roman bishops, especially through its exposure of the defective condition of the education given in the Roman Catholic colleges. Its success, however, was considerable, until its increasing liberalism of tone and independence drew on it the open hostility of Cardinal Wiseman and other prelates who dreaded its influence upon clergy and laity alike.

The death of Doña Gertrudis Gomez de Avellaneda (b. 1816) was announced in February; she was favourably known in all Spanish-speaking countries as a poetess, and her plays, if not remarkable for originality, were uniformly successful on the stage.

A Swiss paper states that Professor Coindet has presented the public library of Geneva with a complete MS. of Rousseau's *Emile* with notes and corrections in the author's own hand, and one hundred original letters, also of Rousseau's, some of which have never been published. The MS. remains of A. W. Schlegel, which have been already utilized by historians of German literature, have been purchased by the Royal Library of Dresden. It is reported that a MS. of eighty-four pages, by Copernicus, has been discovered at Thorn.

The experiment tried some thirty years ago, under Tieck's direction, has just been repeated at Munich, where the Antigone of Sophokles, with Mendelssohn's music, has been produced at the *Hoftheater* with strict classical correctness and severity. The attendance at each performance was large, but it is said not enthusiastic.

The publication of *Neue Mittheilungen aus J. W. von Goethe's handschriftlichem Nachlass* is announced. It will include "Goethe's Scientific Correspondence," arranged by himself, and extending from the year 1812 to 1832, which will occupy two volumes; and "Goethe's Correspondence with the brothers Von Humboldt," in one volume. The letters exchanged between Goethe and Wilhelm v. Humboldt from 1795 to 1832 will form a series of the highest interest and importance.

In the *Revue des deux Mondes* (March 15) M. Alfred Rambaud gives some interesting information about the recent development of female education in Russia. Its extremely democratic character, and the eagerness with which women of all classes engage in teaching as a profession, are fresh points of resemblance between the Empire and the United States. The education given seems to be thorough as far as it goes, but we cannot tell to what extent the Russian lady who has just taken a doctor's degree at Leipzig University "cum laude" is a fair representative of the students at the public schools or gymnasia of the Princess Mary described in the article.

Amédée Thierry, the historian, died at Paris on the 27th ult.

The great Norwegian poet Ibsen, whose works are just now beginning to be known here, has finished a poem which promises to be very important—a trilogy on the history of Julian the Apostate. The subject is treated in a satirical and essentially modern manner.

Art and Archaeology.

A Concise History of Painting. By Mrs. Charles Heaton. London: Bell and Daldy.

MRS. HEATON made her first appearance in literature with a biography of Dürer. She now makes her second with a concise history of painting. Between biography and history there is a great and important contrast, which becomes still more marked as the latter requires more conciseness. It is a question whether the skill of the biographer and the terseness of the historian can be found united in one person. Mrs. Heaton certainly is more concise in her matter than in her style; and it is probable that nature and education have fitted her better for biography than for history. Yet she brings to her task a large acquaintance with the general literature of art, a cultivated taste, and an amount of experience sufficient to enable her to colour in original tones many of the observations which she has to make upon the masters of the many schools to which her attention is directed. Her narrative power is of that lightness and delicacy which are peculiar to women; a flash of genuine enthusiasm embellishes some of her recitals; and the tale is frequently freshened by a playful undercurrent of humour.

The difficulty of combining conciseness with the usual qualities demanded of an historian are extreme. Mrs. Heaton's treatment in this respect gives us cause to inquire whether art history can bear the sort of conciseness which she affects. The general reader may not have reason to complain; but the student will ask how it is that whilst we trace the broad stream of art in every country, the tributaries are invariably left out. The early periods of local schools in Italy are omitted everywhere but at Florence. There is no Paduan or Veronese painting before Mantegna; and we miss the remarkable revival of Altichiero, Avanzi, and Vittore Pisano. At Milan, Foppa, Suardi, Buttinone, and Zenale are ignored in the earlier, Borgognone in the later, period; and Luini or Beltraffio are presented to us merely as pupils of Da Vinci. The Bolognese and Ferrarese are not considered worthy of study till the time of Francia and Gaudenzio. Perugia yields nothing of interest till Perugino comes. Local craftsmen are of no account in Friuli or Piedmont, at Genoa or Pisa, at Arezzo, Parma, Cremona, Pavia, Bergamo, Lodi, Treviso, or Vicenza. The narrative probably gains in general picturesqueness in proportion as the minor details are concealed; but the value of the work to a certain class of readers is in a similar proportion diminished.

Mrs. Heaton has thought it worth while to revive the spectre of Byzantinism, which haunted the pages of history so unnecessarily and so long. It is a pity that she should have done so, for it is not true, though it has been held, that Byzantine art "took the place of the feeble classico-Christian, and is found triumphant in the later works of the catacombs." There is no sufficient foundation for the broad assertion that "all the artists of the eighth century were monks;" and surely it is an error of magnitude to affirm that "Leonardo's divine face of Christ is but the perfect development of the type founded at Byzantium." There are abundant materials at our command to prove that Byzantium was frequently indebted to Italy for artists; and it is possible at

different periods to discern the difference between the form and execution of the Levantines and those which distinguished the genuine Italian.

When painting first revived some portion of its progress was due to the earlier efforts of sculptors; and here a prominent place is justly assigned to Niccola Pisano, who worked with so much efficacy for "the rise" in the thirteenth century. A hundred years later Uccelli, Masolino, and Masaccio owed a great deal more than has been usually conceded to Ghiberti, Donatello, and Brunelleschi; but here Ghiberti, and Ghiberti alone, is considered "the herald of progress," whilst little or nothing is said of Donatello, whose example led to a revolution at Venice, produced Michael Angelo at Florence and ushered in Mantegna at Padua.

Amongst the names which it would be vain to seek in the pages of this history are those of Baldovinetti and Pesellino. Others of equal note are introduced by mere accident into the narrative—that of Castagno in connection with the fable of Domenico Veneziano's murder, that of Piero della Francesca in conjunction with Uccelli's as a master of perspective. All and each of these artists might have been named as party to the reform of the tempera method in Tuscany, and it was incumbent on the historian to show how oil painting was carried to perfection by the joint efforts of these men, whilst it was only introduced into Venice forty years or more after the death of John van Eyck by Antonello da Messina. If there be a bald spot in the "concise history" it is that which treats of the invention of oil medium by the Van Eycks; and if injustice is done anywhere in those pages, it is more particularly so where the author treats of Antonello, who has the misfortune to lie under her displeasure almost as strongly as the "angelic" Fra Giovanni da Fiesole. Here and there we may notice a casual blemish, such as that at page 118, where Costa is made to appear as the pupil instead of as the master of Francia; or at page 129, where Titian's "Diana and Calisto" at Bridgewater House is described as a copy of the original at Madrid; whereas the canvas at Madrid is a copy of that of Bridgewater House. Other mistakes must be assigned to the difficulty which any person writing in England encounters in the endeavour to become acquainted with the latest sources. There is a torpor with us in this respect which is not paralleled in any country in this hemisphere; and it is probably due to the difficulty of looking abroad for such things that Mrs. Heaton has failed to ascertain the following facts:—

Niccola Pisano was born in 1268, and not in 1280.

The earliest Florentine painter of note is not Tafi, but Margaritone, whose span of life extended not, as Mrs. Heaton believes, from 1236 to 1313, but from 1216 to 1293. Tafi, whom she supposes to have been born at the beginning of the thirteenth century, was still alive and in practice in 1320.

Gaddo Gaddi, according to her chronology, came into the world in 1239 and left it in 1312; the real dates of these events are 1259 and 1332.

It has never been denied that Guido of Sienna painted the Madonna of St. Domenico; but it has been proved that the principal figures were re-painted by a later artist, and it has been shown that the date of 1221 cannot be maintained, and must give place to one much nearer the close of the thirteenth century.

The poetic anecdote of Cimabue's meeting with Giotto by the roadside is to be consigned to the same limbo as that of Romulus, Remus, and the she-wolf. The anonymous commentator of Dante tells us how Giotto's father apprenticed his son to a woolstapler at Florence; how Giotto, like many other boys of his age and time, played truant, and how when looked for he was found in Cimabue's shop.

It was not Boniface VIII. but Benedict XII. who sent

a courtier to Giotto to ascertain his skill; and the result was an invitation to Giotto to visit Avignon, which he would have done but for Benedict's sudden death.

Masolino, who lived much longer than any one hitherto has supposed, was still in existence in 1447. Masaccio's birthday was December 21, 1401. Gozzoli's death is no longer uncertain; it occurred in 1498. Botticelli was not born in 1437, nor did he die in 1515; the dates are respectively 1447, and May 17, 1510. Antonio Pollaiuolo's birth was registered in 1429, not in 1430; Pier di Cosimo's in 1462.

There is nothing more touching than the account given in contemporary registers of the death of Domenico Ghirlandaio. He was seized with an attack of the plague on the 7th of January, 1494, which carried him off in four days: and such was the fear of infection prevalent at the time that the painter's body was consigned at midnight to the brotherhood of St. Paul, to which he belonged, and was secretly buried in the dark in the family vault at Santa Maria Novella.

Lucretia Buti, the nun and mistress of Fra Filippo, is a myth; but Fra Filippo did clandestinely obtain the affections of Spinetta Buti, a school pupil in a convent at Prato, and by her he had Filippino Lippi in 1457. On the 18th of April, 1504, Filippino died, and the pious registrar of S. Michele Visdomini, at Florence, added to the entry of his death, "Idio gli perdoni."

If we leave the Italian schools for the sake of turning to the more grammatic ones of the Netherlands, we find but little alteration in Mrs. Heaton's treatment. The statement that blood-streaming crucifixions and disgusting martyrdoms were favourite subjects at an early period in Flanders requires to be confirmed by some authority. That Flanders and Germany had an art of their own from a period coeval with the reign of Charlemagne is known; but this apparently does not interest our author, whose slight allusion to Broederlam is insufficient to give even a clue to the activity of artists in the fourteenth century. Some very old errors are repeated, such as that Hubert van Eyck was affiliated to the guild of St. Luke at Ghent in 1412; that John of Liège recommended John van Eyck on his deathbed to Philip of Burgundy; that John van Eyck exhibited a head of Christ at Antwerp in 1420, and took Roger van der Weyden as his apprentice. Not a word is said of Roger's birth and education at Tournai, not a syllable of Gerard David's existence; Memling's life is sketched without an allusion to the altar-piece of Danzig; and the claims of Justus of Ghent to a high place amongst the Flemings who wandered to Italy are ignored.

The Holbein question is treated without reference to the changes produced by criticism within the last few years. It may be that there is ground for assigning to Sigmund Holbein the portrait of the National Gallery, though it would be desirable that these grounds should be stated. It is still competent to a critic to hold, as Mrs. Heaton holds, that the Darmstadt and Dresden Madonnas are by one hand, though it may be safe to predict that the existence of such a critic will soon be as rare as that of the dodo. It is no longer possible for any historian to speak of pictures of 1512 as being by the younger Holbein, all such pictures being now fully proved to have been executed by the younger Holbein's father.

J. A. CROWE.

ART NOTES.

Herman Grimm has recently published a short pamphlet entitled "Zur abwehr gegen Herrn Professor Dr. A. Springer's Raphaelstudien in der Zeitschrift für bildende Kunst; Heft 3." In reviewing Herman Grimm's recent work, "Das leben Raphaels von Urbino," Professor Springer (see *Academy*, Vol. iii., p. 445) took occasion not only to criticize severely the work

itself, but to make what looks like a personal attack upon the author couched in somewhat unmeasured terms. Professor Springer's position is so prominent and his credit so considerable that Dr. Grimm has felt obliged to take special notice of the attack made upon him. In the above mentioned pamphlet he meets one by one to the number of fifteen all the positive accusations of negligence and inaccuracy which have been brought against him by his critic. What appears to us to be the worst feature of the case is that while Professor Springer has fastened with tenacity on what may be described in the main as slips of the pen and oversights, he has preferred to let alone the really considerable points at issue, which have been carefully noted by Mr. Crowe (see *Academy*, No. 61, pp. 445-46).

The event of the season in the London auction marts has been the sale of three Sèvres china flower-pots of the kind known as *Eventail Jardinieres* from the collection of the late Marquis of Londonderry. These ugly fan-shaped jardinières, with paintings by Doben that marred instead of enhanced the beauty of the delicate blue and white Sèvres, positively fetched the fabulous sum of £4,150. Indeed it was said that they had been bought in for that price by the family of the late Marquis, who had expected them to realize a still larger sum.

The *Journal officiel* informs us that there is carried on in Paris an industrial art of the existence of which most persons are ignorant. This art consists in the restoration of old books and manuscripts, and has been raised by a few experts to a marvellous perfection. These *artistes restaurateurs des livres* cure all the ills that books are heir to. They take out the most inveterate marks and stains; they stop up holes gnawed by rats or eaten by worms; they replace missing lines and leaves in such a way that no one can discover the interpolations; they re-make margins, giving them exactly the colour of the original; in fact, the *Journal* says that often the most learned bibliophiles cannot tell the "restored" copy from the perfect original work. Ornamental frontispiece, editors' marks, vignettes, coats of arms, manuscript or printed pages, all are imitated to a perfection that deceives even the most practised eye. Such restoration is of course expensive. At a sale of books some time ago a tattered, filthy, "almost repulsive" but also "almost unique" copy of the Breviary of Geneva only fetched 500 frs. on account of the horrid condition it was in. The purchaser at once took it to a book restorer, who demanded 500 frs., the sum for which it had been bought, to restore it to youth and beauty. The process he said would take a year.

Naples, so notorious in the seventeenth century for the vindictive jealousy of her artists, has just celebrated the second centenary of the death of Salvator Rosa, all the artists in the city taking part in a solemn ceremony instituted in honour of the greatest of the Neapolitan masters in the Church of *Santa Maria degli Angeli*, where he lies buried. The difference of manners of the seventeenth and nineteenth centuries is illustrated by the fact that no one was stabbed or poisoned on this occasion.

New Publications.

- BECKMANN, E. *Étude sur la langue et la versification de Malherbe*. Elberfeld: Friderichs.
 COLEBROOKE, H. T. *Miscellaneous Essays: with Life of the Author by his son, Sir T. E. Colebrooke*. (3 vols.) Vol. 1. Trübner.
 GROTE, Mrs. *Personal Life of George Grote*. Murray.
 HARDENBERG, F. von. (Novalis.) *Eine Nachlese aus den Quellen des Familienarchivs*. Gotha: Perthes.
 KREMER, A. von. *Culturgeschichtliche Streifzüge auf dem Gebiete des Islams*. Leipzig: Brockhaus.
 LÜBKE, W. *Württemberg u. die Renaissance*. (Festrede.) Stuttgart: Spemann.
 LYTTON, the late LORD. *Kenelm Chillingly*. A Novel. Blackwood.
 MANSELL, the late DEAN. *Letters, lectures, and reviews*. Ed. by Prof. Chandler. Murray.
 MARZIALS, T. *The Gallery of Pigeons, and other poems*. King.
 MORLEY, J. *Rousseau*. 2 vols. Chapman & Hall.
 RIO, A. F. *L'idéal antique et l'idéal chrétien*. Paris: Didot.
 THACKERAY, Miss. *Old Kensington*. Smith, Elder, & Co.

Theology.

Comparative History of the Egyptian and Mesopotamian Religions. (Vergelijkende Geschiedenis von de Egyptische en Mesopotamische Godsdiensten. Door C. P. Tiele.) Amsterdam: Van Kampen. 1872.

THIS is the first volume of what promises to be an excellent and useful work. Dr. Tiele has been, as is well known to those familiar with recent Dutch thought, a diligent student of the science of religion, and he here gives us the results of his researches in one section of the extensive field he cultivates. The work is distinguished throughout by analytic and graphic power, is well written, always clear and intelligible, often subtle and suggestive in thought, acute and incisive in criticism, though it now and then offends by far-fetched interpretations and arbitrary combinations. The mental atmosphere of Holland seems to be meanwhile in some respects propitious to such studies as those of Dr. Tiele. The sacred criticism, literary and historical, there cultivated is of the freest kind. The philosophy which the eloquence of Opzoomer has commended to Dutch theologians is peculiarly well adapted to the explanation of the psychological phenomena the historian of religion has to study. The public taste, too, seems to relish such studies, as a series of works on the principal religions, creditable alike to Dutch scholarship and enterprise, has been issued; while eminent specialists like Kuenen, Dozy, and Kern are well known outside Holland for their studies in the religions of Israel, Islam, and Buddha respectively. Though the work of Tiele cannot claim the merit of strictly original research, it yet exhibits everywhere a vigorous and disciplined mind working in the successive religious strata under the best guides.

The work when completed is intended to be a *Comparative History of Ancient Religions*. These are distinguished from the modern by the characteristic of nationality. All religions which are those of a people or race are ancient, even though they still survive; only those like Christianity or Buddhism, which aim at universality, are modern. The work, which is thus comprehensive enough in its scope, suffers somewhat from the mode of issue. This first volume is in three parts, which have appeared at different times. This has caused the author now and then to repeat himself, as in some of the preliminary discussions on race and mythology, and also allowed time for changes in what may be termed his underlying philosophy, leading, in one case at least—his explanation of the origin of Egyptian animal worship (cf. pp. 128, 807-8)—to a modification of view affecting the entire religion.

The Egyptian and Mesopotamian religions here dealt with have two things in common—they are theocratic and symbolical. By the one their mythologies, by the other their forms of worship, are determined. The influence of race, traditions, migrations, country, history—on religion are recognized, and each made to explain the growth and changes in the national faith and worship. The Egyptian and Mesopotamian races are possibly akin. The Mesopotamian is the so-called Semitic. The limits of this paper compel me to pass over the interesting histories of the religions of Egypt, Babel-Assur, and Phœnicia, and to confine myself to that of Israel.

Dr. Tiele's general conception of the religion of Israel is sufficiently indicated by the place he gives it in his *Comparative History*. It is simply an ancient religion which does not differ even upon its highest standpoint in nature and character from the religions of the surrounding and related peoples. The only distinction is in their very different developments. (Cf. pp. 526, 791.) But in this view he obviously forgets that evolution is creative, and a difference

in development soon amounts to a difference in species. Whatever the religion of Israel was at its origin, it became under the prophets specifically distinct from the other religions of the Mesopotamian stock.

Dr. Tiele's position agrees in the main with Kuenen's. There are, indeed, specific differences. The one brings to his task the habits of an accurate Biblical scholar, gifted with a rare faculty for minute criticism, subtle insight into textual and historical differences, and extraordinary powers of combining apparently unconnected incidents and allusions. The other has the tendencies and learning of a comparative theologian, alive to the similarities and coincidences in the several religions he studies, but more or less dependent for his knowledge of each on eminent specialists. And as the men differ so do their works. But under the differences lie the agreements which indicate Kuenen's as the influence that has chiefly determined Tiele's representation of the religion of Israel.

He holds that "the books of the Old Testament are the sources of a religion which arose first in the ninth century before our era;" that it was "never the religion of the people of Israel, but only that of a very developed section of the nation;" that "the so-called Jewish nation which formed itself after the Captivity is not the people of Israel, but the Mosaic Church, which attempted to realize her theocratic ideal." Hence the question is not—"How a people not more religious than its neighbours and kin can profess a religion so much purer than these, for as a people it has never done this: the question is, How from one of the religious services (*Godsvereeringen*) of Israel a higher religious view can have developed itself, and how the defenders of this view have managed to secure its supremacy and permanent acceptance with many." (pp. 527-8). In working out this thesis Dr. Tiele starts with the Hebrews in Goshen, who, he argues, were neither monotheists nor worshippers of Jahveh. Then he describes the original Jahvism, which, he affirms, was a Kenite religion introduced to Israel in the wilderness by Moses. He next traces in succession the breakdown of the Jahvism, adapted only to the rude tribes of the wilderness, in Canaan under the Judges; its revival under Gideon; the impetus it received under Samuel and the Prophetic Schools; its condition under David and Solomon, neither of whom were monotheists; its struggle for supremacy in Israel under Elijah and Elisha; the rise under Amos and Hosea of a new type of prophet and a more ideal doctrine; the temporary realization of the prophetic ideal under Josiah. When the Deuteronomic Law is composed Jahveh becomes Israel's one God, who may be served only by Levites and at no other place than Jerusalem. But the ideal is soon broken, idolatry returns, and with it comes the sombre prophet, Jeremiah (the sketch of whom, by the way, is the best thing Dr. Tiele has written), and the Captivity. Here the history rather abruptly ends with the intimation that "the Captivity, the formation of the priest-state under Ezra, and the emergence of Christianity belong to the development of the Jewish religion" (p. 775). It is all the more to be regretted that Dr. Tiele ends where he does, as his earlier studies peculiarly qualified him to trace the influence of Persian on Jewish religious thought, and the post-exile period not only offers many crucial points to his construction of Israelitish history, but is specially significant to a comparative theologian as marking the transition from an ancient to a modern religion.

There are many points in a work covering so much and such well-debated ground that invite criticism. Only one or two can be noticed. Dr. Tiele accepts Kuenen's hypothesis as to the relative ages of the Jahvistic and Elohist documents. He does so almost without discussion, unhappily, consider-

ing the state of the question and the religious as well as critical interests involved. But having accepted Kuenen's hypothesis—which has many things to commend it, and is meeting, though not in the precise form or with all the issues Kuenen binds up with it, with large acceptance from the younger scholars of Germany—Tiele does not seem to me any more than its author to seize its proper psychological meaning. If the Jahvistic is the earlier and prophetic, the Elohist the later and Levitical, document, brought down with the Levitical legislation as a whole to the post-exile period, then we have the ideal or spiritual side of the Israelitish religion developed before the sacerdotal. But this would involve higher and milder elements both in the primitive and later Jahvism than Tiele attributes to it. If the prophetic was prior to the priestly ideal, the spiritual an earlier as well as nobler and more extensive growth than the sacerdotal, then it is evident that the character of Jahveh must have been comparatively mild, not much in need of propitiation by sacrifice. And this may help to explain, too, the number and character of the Jahvistic Psalms, and to show how hymns with so little sacerdotalism in them could be written and sung in Israel. But it also shows that the want of any adequate notice of literary remains so religiously significant as the Psalms is peculiarly great in a history whose author holds the priority of the Jahvistic document.

Dr. Tiele's interpretation of the patriarchal traditions do not seem very satisfactory. He resolves them into nature-myths. Abraham is a heaven-god and his wife the queen of heaven. Their relation to Isaac is thus defined:—"The old heaven-god, the midnight heaven, and the moon-goddess are the parents of the laughing day-heaven, or sun-god, who is married to the fatness or fruitfulness of earth, Rebecca" (p. 434). Jacob-Israel is explained as a personification of the people, though originally a god of the year, by virtue, I suppose, of his twelve sons. But this is simply gratuitous conjecture, explains nothing, and does not in any way fit into the narratives. Indeed I regret exceedingly the manner in which Dr. Tiele has dealt with the traditions of the Mesopotamian race, especially when Israel is concerned. He has given here and there indications of what he could have done had not his conception of its later history stood in his way.

The only other point that need be here noticed is Dr. Tiele's theory as to the original Jahvism and its introduction into Israel. He holds that Jahveh was originally a nature-god with his abode in heaven, the god of thunder. And he supports his views by various Mesopotamian and Indo-European analogies by the the symbols, the ark, and the kerubim used in the worship of Jahveh, and by the so-called feast of the Tabernacles, the oldest and for long only general feast of the Israelites, which fell in harvest, when the thunder-and-rain god was mightiest (pp. 545-551). But it seems strange that there should be no hint of this original character in the name of the god, Tiele's interpretation being accommodated not to the (supposed) etymology of the word, but to his own theory. His explanation, however, of the introduction of Jahvism into Israel is much more violent. He holds that Jahveh was originally neither an Israelitish, nor Egyptian, nor Canaanite, but a Kenite god, adopted by the Israelites in the wilderness through the influence of Moses. Now this is not only conjectural, but improbable in the highest degree. Of the Kenites we know little, not enough certainly to warrant what is here said of them. Then the Israelites had already strong religious convictions. Dr. Tiele attributes the Exodus to a religious cause (p. 536). Now it does seem illogical to make the nation which left Goshen rather than allow its worship to be reformed and the Egyptian ritual established in its place, accept so soon after

without any struggle, an entirely new and stern religion. This is the more extraordinary as he repeatedly argues from religious names and traditions that Israel belongs to the Mesopotamian race, and affirms that the name of "the god of spirit and life in Babylon, Hu, Ao, Hea, or Iva is without doubt related to that of Jahveh" (p. 548). Certainly on this ground the inference lay near enough that Israel as a branch of the Mesopotamian stock did not need to borrow, because it had brought from its primitive home the name of its god.

Though thus differing on these and other points from Dr. Tiele, I have found his work interesting and suggestive. In the other sections of his work there is much less ground for difference; and more for commendation. The work in which he is engaged is one of peculiar value to the science of religion. It is with pleasure that I notice his transference from a pastoral charge at Rotterdam to the Remonstrant Seminary at Leyden. He is while superintending that seminary to lecture to the students of the university on the subject he has made so thoroughly his own. His inaugural lecture delivered in the great hall of the university has just come to hand. It is an eloquent argument in vindication of the right of the religion of savage races to be counted the starting-point of religious history. If the place where it was delivered was significant as to the changed relations of old theological enemies, the lecture itself is as significant as to the freedom and fearlessness of religious thought in Holland.

A. M. FAIRBAIRN.

Life and Letters of St. Francis Xavier. Rev. H. R. Coleridge, S.J. Vol. ii. Burns, Oates & Co.

THE second volume of Father Coleridge's work is hardly equal in interest to the first. The letters are so much the most authentic documents which we have that it was natural to give them with scarcely an exception at full, and this involved curtailing everything else, and even omitting some things, like Joam Fernandez' letters on the objections of the Bonzes of Japan, which might have had even a higher interest. The letters themselves are certainly characteristic, but it is inevitable that they should be full of repetitions; the same directions to India, the same requests to Europe occur again and again; and there are letters in which the same doubtful signs of promise are repeated without qualification, for in most of his own letters to Europe the saint observed the rule he recommended to his disciples, and confined himself to what could be published as edifying.

One can trace a certain change in the writer's point of view in this volume compared with the first. For instance, the directions to Mancias turn principally upon fervour; the directions to his later colleagues turn upon humility and tact. These last, in a good sense, are decidedly Jesuitical; perhaps he would hardly have allowed one of his subjects to copy his example, and to try to reward a lady for her attachment to the Society by marrying her daughter somewhat above her station. In the letters to Europe, where he had begun by demanding simply men of approved self-devotion, no matter how uncultivated, to baptize and catechize, we find him first demanding preachers for the different Portuguese stations, then dialecticians from Belgium and Germany to face the climate and convert the universities of Japan, and insisting more and more on the need of interior perfection in the missionaries to be sent, and hinting more and more plainly at the difficulty of maintaining the spirit of the Society under such a total change of conditions; at least this is how it is natural to interpret the reiterated requests that Ignatius will send some one intimate with himself and penetrated with his spirit, even though he should have no

other special qualification, to take up the reins of government at Goa.

Perhaps of the other points in the book the two following are the most noticeable. St. Francis was evidently struck by the great poverty of Japan and by its anarchy, where recent travellers are struck by its elegance and order. His twelve years' experience in the East had not the slightest tendency to incline him to give up hopes of doing what the great mediæval missionaries had done, and converting whole nations from above, and fall back upon the primitive system of converting populations from below.

G. A. SIMCOX.

THE EPISTLE TO DIOGNETUS.

To the Editor of the ACADEMY.

SIR,—In my notice of Overbeck in the *Academy* of January 15 (vol. iv., pp. 27, seq.), I may have seemed to imply in too unqualified a manner that Dr. Overbeck was alone in maintaining the late origin of the Epistle to Diognetus. It is but just, however, to our native scholarship to say that while Overbeck has elaborated the subject with greater fulness, he has been anticipated on the main point, as well as in several of his arguments, by Dr. J. Donaldson in his *History of Christian Literature and Doctrine*, vol. ii., pp. 126-142. Dr. Donaldson, indeed, even goes so far as to hint a suspicion that the Epistle may be the forgery of Henry Stephens himself.

Edinburgh, Feb. 3, 1873.

ROBERT B. DRUMMOND.

Intelligence.

The works of S. Isaac, of Antioch, one of the most eminent Syriac theologians after S. Ephraim, are in course of publication by Prof. Bickell, a distinguished "convertite" and Semitic scholar. The first part is reviewed by Prof. Nöldeke in the *Centralblatt* for February 22nd. S. Isaac appears as a strict censor not only of heresy, but of morals. Their rapid conversion to Christianity failed to extinguish the attachment of the Syrians to the ceremonies of their ancient cults. Thus the Christian women of Antioch are described as sacrificing in secret on the housetops to Venus (Kaukabthâ, "the star"). A most unflattering picture is given of the life of the Oriental monks and clerics.

M. Douen has published some researches on the conduct of Fénelon during the persecutions of the Huguenots, which deal a severe blow to that eminent prelate's reputation for tolerance and humanity. See *L'intolérance de Fénelon. Études historiques d'après des documents pour la plupart inédits* par O. Douen, Paris, 1872.

A French translation of Prof. Nöldeke's popular essay on *The Old Testament Literature*, (see *Academy*, vol. i., p. 69) is about to be published by MM. Derenbourg and Soury.

In the fourth of a series of letters in the *Guardian* on "Manuscript Evangelia in Foreign Libraries," Mr. Burgon calls attention to a fragment of an old Latin version of St. John's Gospel, published under the title *Un Antiquissimo Codice Biblico Latino Purpureo conservato nella Chiesa di Saresano, del Sacerdote Guerrino Anelli*. (Milano. 1872.) It is said to be of the sixth or seventh century, and is inscribed in silver uncials on purple vellum. Mr. Burgon states that it is a fragment of a hitherto unknown recension of the old Latin.

The Rev. T. K. Cheyne, Fellow of Balliol College, Oxford, has in preparation a commentary on the Book of Genesis, somewhat in the style of Tuch's well-known work, but with a more distinct reference to the comparative study of myths and legends, and the elimination of their religious and historical elements.

The Bishop of Natal has another book in the press, a volume of popular "Lectures on the Pentateuch and the Moabite Stone," with appendices containing: 1. The Elohist Narrative; 2. The Original Story of the Exodus; 3. The Pre-Christian Cross.

Dr. H. Grätz has published a valuable dissertation on *The unity of the prophecy of Joel and the artistic division of its parts* (Breslau: Skutsch). He takes the imperatives in i. 13, 14, ii. 1, 15-17, to be rhetorical; the locusts to be actual, not metaphorical; and the prophecy itself to begin at ii. 19, the preceding portion of the book being merely episcodical, as is frequently the case elsewhere in the Bible, e.g. in Jer. xiv., xv. The book was therefore written at one time: it falls into two parts, the former of which is the prelude to the latter. Joel first speaks ironically on the merely formal manner in which the fast-day or fast-days had been kept, and then describes in vivid colours the calamities which had occasioned them, which prefigured the still greater future calamities gathered up under the name of "the day of the Lord."

Contents of the Journals.

Theologische Tijdschrift. March.—Strauss' *The Old and the New Testament*; rev. by Rauwenhoff, part ii. [Misses the scientific tone, and questions the validity of the arguments. The success of the work another symptom of the decay of idealism.]—Contributions to the criticism of the Synoptic Gospels, part vi.; by A. D. Loman. [The artificial arrangement and purposeful character of the parables in Matthew, especially in Matt. xiii. A colossal specimen of ingenuity.]—The superscriptions of the Gospels; by J. T. Bergman. Two works on the Fourth Gospel; rev. by A. D. Loman. [A notice of Mr. Sanday's recent essay (objecting strongly to his "psychological" method), and Dr. Vigeliuss' Inquiry as to the writer of John xxi.]—Literary summary. [Volck on Deut. xxxiii., Chwolson's *The Semitic Peoples*, Govet's *Études Bibliques*, &c.]—Emendation of the text of Origen in Matt., xv., p. 671; by Loman. [Read *εἰτε ἀπὸ μοχθηρίας τῆς διορθώσεως τῶν γραφομένων, εἴτε καὶ ἀπὸ τῶν τῶν τὰ αὐτοῖς δοκοῦντα.*]

Philosophy and Physical Science.

The Principles of Psychology. By Herbert Spencer. (2nd Edition.) 2 vols. Williams and Norgate.

ALTHOUGH psychology occupies the place of a special science in the system of knowledge which Mr. Spencer is engaged in developing, yet his exposition of its principles has necessarily involved a re-arguing of certain fundamental philosophical questions which have been previously discussed in his "First Principles." Indeed such argument seems to constitute the most important part of the new matter that has been added in this second edition of the work before us. For though the study of the human mind is not in itself philosophy, as certain Englishmen and Scotchmen seem to imagine, it is at least a sort of vestibule to philosophy, from which one passes directly to the *locus principiorum*. It is impossible to treat of mind (however phenomenalist be the manner of the treatment) without defining the relation of mental to material phenomena, or we may say of mind to matter, in so far at least as they are objects of thought. *Prima facie*, this relation is twofold: matter is both cause and object of mind. Thinking is a function of the brain, whatever else it may be, and what we think about is chiefly the external world. But the complete determination of this relation in its two aspects is the central problem, not perhaps of all philosophy, but of modern European philosophy since Descartes. I do not mean that this is what philosophers have been most deeply concerned to discover; that must be stated more generally as the relation of the thinker to the universe; but they have expected to find by the solution of the former question the data for answering the latter. And the success of Mr. Spencer's exposition, considered as systematic, must be held to depend on his success in answering this question; for his treatise, however valuable and interesting be the varied discussion that it contains, is certainly not an exposition of psychology, as the subject is commonly understood—what Mr. Spencer calls subjective psychology. It consists of eight books, of which the first contains chiefly human physiology, the third chiefly comparative physiology or biology (treated from an original and interesting point of view), the fifth a mixture of hypothetical physics with that hypothetical-deductive biology which is now common among disciples of Darwin; the sixth is to a great extent logical, the seventh avowedly metaphysical, while the eighth forms a transition to the sociology which is to follow. The subjective psychology is therefore given us in a somewhat fragmentary state. This is perhaps partly due to the manner in which the book has been composed. To half re-write a work written fifteen years ago is a difficult task, and I scarcely think that Mr. Spencer has been quite successful in performing it. He has transposed the two halves of the original treatise, in which Analysis preceded Synthesis; and

this is no doubt the most natural order of treating the subject as a sequel to the previously issued *Principles of Biology*. But the result involves two disadvantages: (1) the results of Analysis (of perception of space and primary qualities of matter in particular) are to some extent assumed in the Synthesis; and (2) Mr. Spencer has been obliged to prefix to the Synthesis (in Part ii.) an account of the elements and laws of mind which is not completely intelligible without the Analysis, and which after all does not cohere very well with the other parts that follow, as (*e.g.*) the view of the laws of association given in Part ii. is not traceable in Part iv.

However, it is difficult to criticize the arrangement of the work without some pre-judgment of the points discussed in it. For in fact the very definition of psychology and determination of its relation to other sciences (and this latter is a point which Mr. Spencer is especially concerned to settle) cannot be given without in some way deciding what has been called the central problem of philosophy. Before we can study mind we must settle what mind is: yet we ought not to settle it without giving some reasons for our decision: and yet every writer of originality feels that he cannot adequately give such reasons till after a careful exposition of his peculiar doctrines. All, therefore, that we can expect is that a writer's definition of his subject shall be clear and distinct in itself, and shall be found to cohere with his conclusions when we have been led up to these.

But, tried by this standard, Mr. Spencer's work scarcely seems satisfactory. His view of the subject appears to have a fundamental incoherence, which shows itself in various ways on the surface of his exposition, but of which the root lies much deeper, in his inability to harmonize different lines of thought: though each of these is separately pursued by his patient, powerful, and comprehensive intellect not only to results always interesting and suggestive, but often with remarkable closeness and precision of method. This incoherence I must attempt to exhibit, as far as is possible. Let us begin by asking what Mr. Spencer means by psychology. In his first chapter (§ 7) he contrasts the "psychological" with the "physiological" point of view, and afterwards uses several times the cognate antithesis of "psychical" and "physical." At first sight this pair of terms seems intended to express what Hamilton calls natural dualism, that view of the relation of mind and matter which the post-cartesian philosophy has been continually trying to transcend, but which the progress of physical science since Descartes has only rendered sharper and more definite. Thus in § 18 we are told that "without questioning the truth of the assumed correlation between the changes which *physically considered* are disturbances of nerves, and those which *psychically considered* are feelings, it may be safely affirmed that physiology, which is an interpretation of the *physical* processes that go on in organisms in terms known to physical science, ceases to be physiology when it imports into its interpretations a *psychical* factor . . . here we are treating of nerve-actions on their physiological side, and must ignore their psychological side." From this passage we should infer that psychology treated of feelings, and physiology of nerve processes; and a similar inference is suggested by other passages, as (*e.g.*) § 76, "the psychical relation between two feelings answers to the physical relation between two disturbed portions of grey matter." At the same time, between the two passages quoted (in § 53) he has used psychology in a wider sense, so that only one division of it—subjective psychology—has for its subject-matter the states and relations called "psychical" in the above-quoted passages. Though § 18, &c., would have led us to infer that this was psychology proper, in § 53 it is not even presented as the most impor-

tant part of the study, but as secondary to objective psychology.

What then is objective psychology? We should naturally guess it to be the physiology of the nervous system (what in § 57 is called neuro-physiology)—the study which deals with those “physical changes” which he regards as correlative to “psychical changes.” And this would be confirmed by the fact that Part i., entitled “The Data of Psychology,” is chiefly and for the first five chapters entirely occupied with the structure and functions of the nervous system; and by the opposition (in § 37 and elsewhere) of “objective changes or nervous actions” to “subjective changes or feelings.”

But in truth one of the most original and suggestive of the new points of view which we owe to Mr. Spencer is the distinction between objective psychology and physiology. Objective psychology as he defines it does not deal with nervous actions or changes in the organism as such, but with the connexion between the relations of these and relations among the phenomena of the environment. Indeed in § 53 he seems to give this as the definition of psychology generally, and thus to present quite a different antithesis between psychology and physiology from that which the corresponding adjectives have been used to express. Thus “subjective psychology” would not be the study of “feelings or mental states considered in themselves, but in their relation to the environment.” But in § 57 he describes Part ii., as occupied with “the natures of particular modes of consciousness, as ascertained by introspection” without any reference to the environment: which is also ignored through the greater portion of Part ii.

My conclusion on the whole is that the subject divides itself for Mr. Spencer into three portions: (1) physiology supplying those facts respecting the nervous system which form the “data of (objective) psychology;” (2) objective psychology which surveys the relation of the organism and its changes to changes in the environment, and “the totally independent science of subjective psychology, treating of feeling or consciousness.” But if so, his terminology should have been made to correspond throughout with this view.

So far, though the antithesis of “psychical” and “physical” seems involved in some confusion, that of “subjective” and “objective” has remained clear. “Feeling and nervous action” are “the subjective and objective faces of the same thing,” although it is not objective psychology but physiology that investigates these “objective faces” considered in themselves. But soon this second antithesis gets confused in its turn. In § 53 “subject” seems to be used as an equivalent term for “organism;” and again, in § 81, feelings are spoken of as having a “subjective origin,” when the meaning is that they are originated within the organism. In fact we may say generally that when Mr. Spencer is considering the relation between the organism and the environment he uses “subjective” as equivalent to “internal;” but when he is considering the relation between feeling and nervous action he restricts “subjective” to the former.

But our perplexities are only just beginning. In Part i., as I have said, the view of natural dualism is sharply and clearly given. Although thoughts and feelings are so inseparable from nervous action that we may fairly speak of the two as “subjective and objective faces of the same thing,” yet Mr. Spencer says “we remain utterly incapable of seeing, and even of imagining, how the two are related;” and so mind still continues to us something without a kinship with other things, and subjective psychology a totally unique science.”

It is to be observed that a certain carelessness of terminology is involved in speaking of mind as the subjective counterpart of nerve-action, as on Mr. Spencer’s view this is only one aspect of mind. Objective psychology is, as we

have seen, the study of mind in another aspect, and accordingly we find in cxi. of Part iv. that “intelligence consists in the establishment of correspondences between relations in the organism and relations in the environment.” We need, therefore, a word less ambiguous than mind to express that which subjective psychology specially contemplates. A word commonly used is “consciousness,” and this Mr. Spencer employs in § 56 in the restricted sense, which we want. “Thoughts and feelings constitute a consciousness . . . until it acknowledges its indebtedness to subjective psychology objective psychology cannot legitimately use any terms that imply consciousness.”

But in Part iv., § 179-80, Mr. Spencer speaks as if—so far from our being “utterly incapable of seeing” how consciousness and nervous action are related—we could see how the former naturally arises at a particular stage of development of the latter. Here the prominent distinction between psychical changes or consciousness and physical changes would seem to be that the former make a successive unbroken series. We are told that the “differentiation of psychical from physical changes” is slight in creatures like starfish and centipedes; until the seriality of the changes is complete they are to be regarded as only “incipiently psychical.” But as soon as there results an “unbroken series of changes *there must arise a consciousness.*” I can scarcely conceive that when this was first written (in 1855) Mr. Spencer would also have written the passages quoted from Part i.

But if in developing his objective psychology Mr. Spencer shows a tendency to move from the dualistic view of Part i. towards materialism, his subjective psychology is open to a complaint of exactly the opposite kind. I have before noticed the twofold relation in which, in the view of Natural Dualism, matter stands to mind. A peculiar portion of it, nerve-matter, is so related to mind that changes in it always accompany mental states; but again, matter generally is the object of mental processes—perception and thought. We have been so far occupied with the first relation. But the least reflection will show that this involves the second. For when, after thinking of material phenomena as facts inseparably connected and yet totally without kinship with mental phenomena, we turn to give an account of these latter, it is obvious that we must include among them those very thoughts of material phenomena which we have just been thinking—representative cognitions of matter; and as all are agreed that these are derived from perceptions or presentative cognitions, we must include also these latter. But in Part ii. c. 2 on the “Composition of Mind” no mention is made of cognitions of matter. We are told that “The proximate components of mind are feelings and the relations among feelings;” these latter being afterwards explained to be transitions from one feeling to another. The term feeling is no doubt a very general one, and might be used to include cognitions of matter. But not only does Mr. Spencer subdivide the class of feelings into emotions and sensations, making no mention of such cognitions, but afterwards when he comes to speak of perception (e.g. iv., cviii., § 211) he analyses it into sensations and relations among sensations. “Every perception must be made up of combined sensations, and must so be in one respect sensational . . . sensations are primary undecomposable states of consciousness, while perceptions are secondary decomposable states, consisting of changes from one primary state to another,” or more exactly “when consciousness is almost wholly occupied with changes—with the relations among sensations—and sensations are present so far only as is needful for the establishment of relations among them, we have the condition of consciousness called perception.”

And when in § 480 he gives the complete classification

of mental phenomena, which should perhaps have been given in Part ii., we find that in all the four sub-classes of the class of cognitions, (1) presentative, (2) presentative-representative, (3) representative, (4) re-representative, consciousness is occupied with relations among sensations and faint copies of sensations.

And further, though in Part ii. feelings are said to "occupy space" and to be "related to other feelings in space," so that cognitions of extension (though not of matter) are incidentally recognised: in Part vi. we find the cognition of extension, or space-intervals between feelings, hypothetically analysed into cognition of possible time-intervals, "a relation between co-existent positions represents a relation between successive positions;" and therefore the ultimate analysis of consciousness seems to leave us only feelings and relations of (1) likeness and unlikeness, and (2) order in time—actual or hypothetical—among feelings.

We come then to this rather singular result: on the one hand material processes are described as facts, "totally without kinship with feelings," and on the other hand the cognitions of these material processes are analysed into feelings and transitions between feelings—which are themselves, as Mr. Spencer takes care to point out, momentary feelings. Though in Part ii. the reader's faculty of representing matter in motion is strained to the utmost to conceive the molecular processes in nerve-centres and nerve-fibres which are supposed to accompany feelings and relations, these representations are not there recognised among the mental phenomena upon which he is asked directly to reflect. But incidentally he is told that the "conception of an oscillating molecule is built out of many units of feeling," and the analysis of the latter half of Part vi. shows how it is so built. Thus, though matter when viewed as cause or inseparable concomitant of mind seems totally without kinship with it, matter viewed as object of mind seems to resolve itself into purely mental elements. The dualism so explicitly maintained on the one side seems evanescent on the other; and we seem landed in the pure subjectivism, or what may be called constructive Humanism, of Professor Bain.

But this conclusion Mr. Spencer repudiates in the strongest way: as *e.g.* in § 88, at the conclusion of the chapter on "The Relativity of Feelings," he tells us that, although "our states of consciousness are the only things we can know," we cannot prove this without "tacitly or avowedly postulating an unknown something beyond consciousness." Now in saying this he seems to me to misapprehend the nature of the postulate to which he refers; and the misapprehension is of fundamental importance. In the chapter which § 88 concludes (Part ii. c. 3) he has given an elaborate proof of the proposition that, "though internal feeling habitually depends upon external agents, yet there is no likeness between them either in kind or degree." The feeling, he argues, is an effect which varies quantitatively and qualitatively according to the specific structure of the organism, its individual structure, the part affected, the condition and motion of that part, &c., while the cause remains the same. All this is most important to notice, and no one has ever put it better than Mr. Spencer. But in conceiving these organisms and the matter acting on them we are conceiving systems of material particles, extended, solid, heavy, of definite size and shape, definite mutual relations, continually changing in a definite manner; and further our conviction of the cogency of Mr. Spencer's arguments depends on the assumption that the representations of matter in motion involved in our apprehension of these arguments are *true* representations, or sufficiently near the truth; and that cognition of truth should not be the same in all consciousnesses is strictly inconceivable. It

is then not an "unknown something," but a very definitely known something that Mr. Spencer has been postulating; viz.: matter extended in three dimensions, solid, subject to mechanical laws, moving, vibrating, &c. If now these definite conceptions of something other than consciousness (though its object) are invalid, the argument that has used them must be invalid too. No process of inference can at once destroy its own assumptions and establish some further conclusion.

But to return: for I am examining the consistency of Mr. Spencer's conclusions rather than his arguments. Suppose the postulate to be that an unknown something beyond consciousness exists: we may at least expect that the state of consciousness in which we think of this unknown something (in so far as we can be said to think of it) shall be carefully examined and compared with other elements of consciousness. For we observe that when a metaphysician (if I may apply the invidious term to Mr. Spencer) announces that some object of thought is "unknown," it is not quite certain what he means by it. *E.g.* in the first chapter of Part ii. Mr. Spencer argues that the substance of mind is unknown, at the same time holding that we cannot but think in mind something that "persists in spite of all changes and maintains the unity of the aggregate in spite of all efforts to divide it." Other thinkers again (*e.g.* Cousin and Mansel) declare that mind is directly known to us as substance. But when asked what they know about it (apart from its varying phenomena), they can only predicate persistence and unity, so that their knowledge comes to much the same as Mr. Spencer's ignorance.

What then is our exact nescience of this "something beyond consciousness?" Here again Mr. Spencer's different utterances are hard to reconcile. Sometimes he seems quite in earnest with its "unknownness," *e.g.* in § 448, he speaks of this "consciousness of something which is yet out of consciousness" as "indefinable," and contrasts it with "the vivid and definite states of consciousness known as sensations." On the other hand in an interesting discussion of the scope of logic, introduced for the first time in this edition (§ 302-305), he tells us that "logic . . . contemplates in its propositions certain connexions predicated, which are necessarily involved with certain other connexions given: *regarding all these connexions as existing in the non-ego*—not, it may be, under the form in which we know them, but in some form." But in § 473, where Mr. Spencer illustrates by a diagram his "Transfigured Realism," the view seems to be this: although we cannot say that the real non-ego resembles our notion of it in "its elements, relations, or laws," we can say that "a change in the objective reality causes in the subjective state a change exactly answering to it—so answering as to constitute a cognition of it." Here the "something beyond consciousness" is no longer said to be unknown, as its effect in consciousness "constitutes a cognition of it." We know more about it than merely that it exists, though only this, that the changes in our consciousness exactly answer to the changes in it. But there is yet another view which some passages suggest: viz., that the non-ego, however unknown in other respects, is rightly thought as "Force." It is not merely that he speaks (as in § 63) of "outlying activities" and "external forces," for it might be said that by "activity" and "force" is merely meant the cause of change, so that this view might coincide with the previous one. But in the chapters in which Mr. Spencer describes what he calls the "differentiation of subject and object," he explains how I come to be conscious of a force without me "somehow allied to that which I distinguish as force" in myself, and how "the root-conception of existence beyond consciousness becomes that of resistance plus some

force which the resistance *measures*." If this conception be legitimate and valid, as I understand him to argue, the "unknownness" of the non-ego is still further reduced.

But whether the "something out of consciousness" be (1) really unknown and only reached in an "indefinable" consciousness, or (2) knowable in respect of the connexions of its parts, or (3) known in so far as the changes in it "exactly answer" to changes in consciousness, or (4) rightly thought as force, akin to and measurable by our own sensations of muscular effort, it seems at any rate clear that it is not extended and solid, not the material world believed in by ordinary men. And when in the physical parts of his treatise (as in the development of objective psychology generally) Mr. Spencer seems to have in view the material world of Common Sense, we easily suppose him to regard it *quâ* solid, extended, &c., as merely "phenomenal."

It only remains to ask how he justifies this view as against common sense. We look for this justification in Part vii., where he undertakes to show the "congruity with other dicta of consciousness" of that view of subject and object which he has assumed throughout.

But—and here is the last surprise that I have in store for the reader, which will, I fear, reduce him to a state of hopeless bewilderment—Mr. Spencer's very original argument, which is conducted through eight chapters with much earnestness and intensity of conviction, is not *against* but *for* Common Sense! We have naturally associated this Absolute of his, which is the cause of our sensations and perceptions but inexorably refuses to resemble any of them, this "mysterious" something out of consciousness, just reached in an "indefinable" consciousness with the "Ding an Sich" of Kant, or the Noumena that play hide and seek with us in several chapters of Mr. Mill's Logic; when suddenly Mr. Spencer turns round and fires his argument full in the face of Kant, Mill, and "metaphysicians" generally. He tells us that "metaphysicians" illegitimately assume that "beliefs reached through complex intellectual processes" are more valid than "beliefs reached through simple intellectual processes;" that the common language they use refuses to express their hypotheses, and thus their reasoning inevitably implies the common notions which they repudiate; that the belief of Realism has the advantage of "priority," "simplicity," "distinctness." But surely this prior, simple, distinctly affirmed belief is that of what Mr. Spencer terms "crude Realism;" the belief that the non-ego is *per se* extended, solid, even coloured, (if not resonant and odorous). This is what common language implies; and the argument by which Mr. Spencer proves the relativity of feelings and relations, still more the subtle and complicated analysis by which he resolves our notion of extension into an aggregate of feelings and transitions of feeling, lead us away from our original simple belief—that (*e.g.*) the green grass we see exists out of consciousness as we see it—just as much as the reasonings of Idealism, Scepticism, or Kantism. He says himself that "the *primitive* belief" that redness exists as such out of the mind "is thus rendered as hard for the psychologist to entertain as *its opposite* is hard to entertain for the *uncultivated*." But when "the psychologist" (whom I suppose we must carefully distinguish from the metaphysician) has got rid of this "primitive belief," what becomes of the "argument from priority?" when he has further shown that our apprehensions of space are relative and indeed has elaborately analysed order in space into hypothetical order in time symbolized by co-existent feelings—what becomes of the "argument from simplicity?" and when the object is left an "indefinable" something, to whose nature we perhaps vaguely attain by represented feelings of muscular tension, what becomes of the "argument from distinctness?"

Really the long discussion in Part vii., in which Mr. Spencer first seems to be maintaining Natural Realism and then proceeds to denaturalize it, has all the serious incongruity of an intense metaphysical dream.

Here I must conclude. Whatever may be the case with the ego and the non-ego, Mr. Spencer's opinions about them seem to me certainly "unknowable." None the less must it be said that the execution of separate portions of the work is often admirable. Of the new matter we may especially select for praise the physiological exposition in Part i. and the discussion of the social sentiments in Part viii. But, throughout, the great range of exact knowledge possessed by Mr. Spencer, the originality of his treatment and leading generalizations, the sustained vigour of his scientific imagination, the patient precise ingenuity with which he develops definite hypotheses where other thinkers offer loose suggestions, are no less remarkable than the mazy inconsistency of his metaphysical results.

H. SIDGWICK.

Notes on Scientific Work.

Botany.

The Embryo of Grasses.—Few points in vegetable morphology have been more debated than the interpretation of the gramineous embryo. The plumule enclosed in a sheath (pileola) lies upon a large cushion-like body (the scutellum or hypoblast), and on the opposite side of the plumule is an additional minute body (the lobule or epiblast). Without enumerating all the views that have been held with regard to these three structures it is sufficient to mention that the older botanists agreed with Mirbel in regarding the scutellum as a cotyledon, while, more recently, the view of Richard has been generally adopted, according to which the pileola is the cotyledon, and the scutellum and lobule stem structures. This view has been ably supported by Clarke (*Trans. Linn. Soc.*, vol. xxii.), and the strong argument in favour of it was the impossibility of regarding both pileola and scutellum as foliar organs, inasmuch as they would in that case represent two superimposed leaves upon the same side of the axis. Van Tieghem suggests (*Ann. d. Sc. Nat.*, 1872, pp. 236-276) that the pileola is stipular, which prepares the way for accepting the cotyledonary theory of the nature of the scutellum. This would make the cotyledon play the same part as in palms and *Liliaceæ* of an organ for absorbing the nutriment stored up in the albumen. Hanstein (see *Academy*, Sept. 1st, 1872, p. 328) fully supports the revived and no doubt correct theory of Mirbel. It may be remarked that, standing alone, Van Tieghem's argument that the vascular tissue of the scutellum ought to form a loop if it is not a foliar organ is not very weighty. What view is to be taken *now* of the embryo of *Zostera*?

Reproduction of Lycopodium.—J. Fankhauser (*Bot. Zeitung*, 1873, pp. 1-6) has supplied what has long been a great desideratum in the life history of the higher cryptogams. *Selaginella* alone, amongst the *Lycopodiaceæ*, possesses two kinds of spores, one of which ultimately produces the embryo, with the intervention of a prothallial stage. The details of the reproduction of this genus have been completely worked out by De Bary and Pfeffer. *Lycopodium*, however, has spores of only one kind, and no one has hitherto succeeded in tracing the further development of these. Fankhauser has lately found attached underground to young plants of *L. annotinum* a curiously grooved and lobulated body, which proves to be a prothallus bearing, like that of *Ophioglossum*, both archegonia and antheridia. This important discovery would seem, therefore, to entail the removal of the isosporous *Lycopodiaceæ* to the neighbourhood of Ferns. It is comprehensible that *Lycopodium* might merely have a homoplastic agreement with *Selaginella*. What, however, are we to say in the case of the carboniferous *Lycopodiaceæ*, of which *Lepidostrobus* and *Flemingites* agree with *Lycopodium* in only having had spores of one kind, while *Triplasporeites*, like *Selaginella*, had two kinds?

Distribution of the Cupuliferæ.—An elaborate memoir by CErsted (*Vidensk. Selsk. skr.*, 1871) is devoted to a preliminary study of existing *Cupuliferæ*, principally with reference to their relations to fossil species. These were to have been discussed in the concluding portion, but of this the death of the author has unfortunately deprived us. His classification differs somewhat from that adopted by De Candolle in the *Prodromus*. Three suborders, *Fagineæ*, *Quercineæ*, *Castanineæ* are established; the last, having the styles stigmatic only at the apex, is distinguished by this character from the first two, in which the styles are stigmatic on their inner surface. *Fagineæ* comprises *Fagus* and *Nothofagus*, a genus constituted for the beeches of the southern hemisphere.

Quercinae consists, besides *Quercus*, as limited by Ersted, of *Cyclobalanopsis*, a small group of oaks with the habit of chestnuts from S.E. Asia. *Castaninae* is formed of *Castanea* and two new genera, *Pasania* and *Cyclobalanulus*, formed of species which De Candolle reckoned amongst oaks. Each of these suborders has had its own centre of distribution: the chestnuts in the Malayan Archipelago, the oaks in Mexico. At the present epoch, however, the beeches are widely scattered, and their centre of distribution must be looked for in the past. *Fagus sylvatica* is European, *F. ferruginea* belongs to N. America, and *F. Sieboldii* is limited to Japan; the species of *Nothofagus* inhabit South Chili, New Zealand, Terra del Fuego, and Tasmania. Ersted thinks that Japan supplied the connecting link between the northern and southern areas—*F. Sieboldii* being the only species in the north with the characteristic nervation of the south. The existing flora of Japan as well as that of New Zealand, Tasmania, and Chili is miocene in character; and beeches existed at any rate in the pliocene, since *F. sylvatica* has been found in deposits of that age in the valley of the Arno. Although Ersted seems to have held that the three divisions of the *Cupuliferae* originally diverged from a common stock, he appears also to have regarded the present world distribution of the family as implying that the species spread from three equatorial centres as they augmented in number. Transitional forms arose from the blending of the expanding areas belonging to each group; but this seems a somewhat violent supposition. *Cyclobalanulus* is the form of *Castanina* most remote from oaks and beeches; of the other genera of the Indo-Himalayan region *Castanea* approaches the beeches, *Pasania* the oaks; *Cyclobalanopsis* in the same region approaches chestnuts. It is hardly possible to understand how these genera could have arisen by anything like natural hybridism. Nor does Ersted favour the view which has been maintained by Grisebach, that identical climatic conditions are correlated with similarity of organization, inasmuch as he remarks its inability to explain the existence of the *Ilex* section of oaks under the same latitude all round the world, although under very different climates. The only reasonable explanation of intermediate generic forms is that they represent a more generalized type, belonging to a stage in the genetic series antecedent to the appearance of those they connect.

Production of Alkaloids in Cinchona.—Howard states (*Pharm. Journ.*, Jan. 11, 1873) that 20 lbs. of the dried leaves of *Cinchona succirubra* yielded on analysis only a minute quantity of cinchonidine, which he is inclined to attribute to the accidental presence of a minute fragment of bark. This appears to prove that the leaves play no direct part in the formation of the alkaloids. Plants form their albuminoids probably in the stem-tissues from the starch, or substances derived from starch, supplied by the leaves and the ammoniacal salts taken up by the roots. The alkaloids of cinchonas are no doubt formed from the same materials, and the results obtained by Broughton (see *Academy*, February 1st, 1873, p. 49), in which increased manuring with ammoniacal compounds produced an additional amount of alkaloids, would seem to indicate that the formation of alkaloids was a means by which the plants got rid of superfluous nitrogen. This is confirmed by the consideration that the alkaloids are stored up in tissues, which being continuously renewed internally and desquamated externally are only temporarily a part of the plant's economy.

The Secretory Canals of Plants.—In a lengthy paper on this subject in the *Annal. des Sciences Nat. (Botanique)* for November, 1872, Van Tieghem draws the following conclusions:—Coniferæ, he states, never possess canals in the primary cortical parenchyma of the root; but this is the only region from which secretory organs are entirely absent in this order. All the other tissues of the plant may contain them, and in this respect six principal modifications may be distinguished, as follows:—1. No canals in the root nor stem; *Taxus*. 2. No canals in the root; canals in the cortical parenchyma of the stem; *Cryptomeria*, *Taxodium*, *Podocarpus*, *Dacrydium*, *Torreya*, *Tsuga*, *Cunninghamia*. 3. No canals in the root; canals in the cortical parenchyma and in the pith of the stem; *Ginkgo*. 4. A secretory canal in the root; canals in the cortical parenchyma of the stem; *Cedrus*, *Abies*, *Pseudolarix*. 5. Canals in the wood of the fibro-vascular bundles of the root and of the stem; canals in the cortical parenchyma of the stem; *Pinus*, *Larix*, *Picea*, *Pseudotsuga*. 6. Canals in the liber of the fibro-vascular bundles of the root and of the stem. Canals in the cortical parenchyma of the stem; *Araucaria*, *Widdingtonia*, *Thuja*, *Cupressus*, *Biota*. In Cycadeæ the canals are found disseminated through the cortical parenchyma of the stem; the pith of *Cycas* appears destitute of them. In their distribution they resemble that which occurs in Coniferæ of the second class. The author considers secretory canals to be the highest degree of development of the secreting organs of plants.

Parasitism and mode of Propagation of Lichens.—Two important papers on this subject appear in the *Annal. des Sciences Nat. (Botanique)* for November, 1872. Janczewski, in a paper on the Parasitism of *Nostoc lichenoides*, refers to the fact that what were at one time described as the "bulbils" of *Anthoceros laevis* are now generally acknowledged to be small collections of a *Nostoc* parasitic on the tissue of the leaf. They are still, however, considered by Hofmeister to be the organs of reproduction of the *Anthoceros*, although he never

saw them escape from the parent plant. The writer found stomata on the under side of the frond of *Anthoceros*, which had not before been observed; the upper surface of the frond being entirely destitute of these organs. It is these stomata that are attacked by the *Nostoc*, and the writer succeeded in artificially inoculating them with the parasitic alga. The same parasitism was observed of the *Nostoc* on the leaves of *Blasia pusilla*; and the same parasite was found to attack the largest of the two kinds of cells of which the leaf of *Sphagnum acutifolium* is composed. The alga is also parasitic on the rhizome of *Cycas* and of *Gunnera scabra*. The second paper is by Woronin, *Researches on the Gonidia of the lichen Parmelia pulverulenta*. He confirms the previous observations of Famintzin and Baranetzky that the gonidia of this lichen and of *P. parietina* produce zoospores, which he describes as bi-ciliated, and gives an exact account of their mode of escape from the gonidia. These zoospores, after the cessation of their vibratile motion, caused by the cilia, become covered by a membrane after the ordinary manner of the zoospores of Algae, and form themselves into gonidiform bodies, increasing by division, but producing neither filaments nor hyphae, but only giving birth to new gonidia; in other words, to young individuals of a unicellular alga of the genus *Cystococcus*. This observation of the actual germination of the zoospores he states to be a link in the chain hitherto wanting. Woronin sums up strongly in favour of Schwendener's much disputed theory that Lichens are not independent organisms, but are composed of Fungi parasitic upon Algae (the so-called gonidia), though he considers a further series of very careful experiments will be necessary either to prove or disprove the theory. Both papers are beautifully illustrated by plates.

Introduction of *Loranthus Europæus* into Ireland.—This parasite, belonging to the same natural order as the mistletoe, is well known in the south of Europe, but attempts to introduce it into this country have hitherto failed. Dr. David Moore, the curator of the gardens of the Royal Dublin Society at Glasnevin, has at length succeeded in growing it on two species of oak. The methods hitherto attempted had been by either placing the seed of the parasite outside the bark or beneath the epiphloeum or endophloeum, resting on the albuminous wood, but these had not been successful. It occurred to Dr Moore to bruise gently the soft bud on a young shoot of the previous year, and to insert the seed of the parasite in the centre of the partially bruised young bud; and by this method two of the seeds germinated, the seeds remaining dormant and only covered over with their viscous gelatine for more than a twelve-month after their insertion before they began to shoot. The following parasites are also now successfully grown in the Glasnevin Gardens:—*Orobanche Hederae* and *minor*, *Lathraea squamaria*, and six species of *Cuscuta*, as well as the mistletoe, which is not a native of Ireland.

A New Potato-disease.—E. Hallier describes in the *Zeitschrift für Parasitenkunde*, 1873, Bd. 4, Heft 1, a new potato-disease which has appeared in the crop at Apolda, near Jena. The disease differs from the one ordinarily known in this country in attacking at once the tubers and not the leaves. The tuber is found to be covered by a purplish felt, which is the mycelium of a fungus; the skin of the potato is in some cases apparently not penetrated by this mycelium, while in others close examination with the microscope shows that it is, the skin being in these cases covered by a number of black spots having the appearance of the perithecia of a pyrenomycetous fungus, the tuber becoming then completely destroyed by a cancerous disease; the fungus, which probably belongs to the genus *Sclerotium*, appearing always to accompany the disease. Prof. Hallier thinks that the remedy will probably be the same as in the ordinary potato-disease, selecting early kinds, using only mineral and no animal or vegetable manures, and a careful selection of the best adapted soil. At Apolda the geological formation is the Keuper; the past summer was remarkably dry, the disease appearing in the autumn.

Physiology.

Special mode of Development of certain Batrachians.—In a letter printed in the *Revue scientifique*, No. 37, 1873, M. Jules Garnier communicates some remarkable observations that have been made by M. Bavay on certain Hylodes which exist in large numbers in the Island of Guadaloupe. These animals are widely distributed over the island, being found not only near the sea, but in the higher lands of the interior, and after rain their croak makes the air resonant. The physical features of Guadaloupe, a volcanic island the soil of which is composed of tufa, pozzuolana, and similar material, are so peculiar and so very unfavourable for the maintenance of tadpole life, which is essentially piscine, that M. Bavay was led to expect the existence of some peculiarities of development. The ova were easily procured, as they were everywhere present under moist leaves. No tadpoles could be discovered, but many of the frogs were of an extraordinarily minute size. The eggs were spherical, with a diameter of from three to four millimeters, and were each provided with a small spheroidal expansion resembling a hernia of the gelatinous mass through a pore in the envelope. In the centre of the sphere the embryo was visible, lying on a vitelline mass of a dirty white colour, and having a thin body, a large head, and four styliform

members with a recurved tail. When the egg was touched the embryo moved rapidly and changed its position. A day later the embryo was perfect, coloured, with a tail as long as the body, translucent, and like that of a tadpole. The limbs immediately formed, and at the expiration of a few days little frogs of a dark greyish brown colour, and *without a vestige of a tail*, escaped from the egg. M. Bavay's observations have established the following facts:—1. That this *Hylodes martinicensis* commences life by a rotatory movement of the future embryo. 2. The fully formed embryo performs the rotatory movements more rapidly, but in a horizontal plane. 3. The branchiæ make their appearance, and again vanish sometime afterwards. 4. The larva in the ovum is provided with a tail and limbs. 5. The tail of the larva not only facilitates the movements of the imprisoned animal, but also aids respiration by the numerous and minute vessels which ramify in this highly developed appendage. 6. The animal issues from the egg in the form which it preserves throughout life. As M. Garnier observes, these observations seem to constitute a starting-point for a special investigation of great importance, and have a close relation to the question of the adaptability of species to surrounding conditions. It may be asked in this case whether the frog has been created with special modifications adapting it to live in an island destitute of marshes, or has it in course of time acquired a new mode of development enabling it to survive under the exceptional conditions under which it has been placed?

Histology of the Retina of the Horse.—C. Golgi and N. Manfredi (*Giornali della R. Acad. di Med. di Torino*, August, 1872, abstract in *Centralblatt*, February 1st, 1873) state that if the fresh eye of the horse be macerated in dilute (0.25 to 0.75 per cent.) solution of bichromate of potash, or of chromic acid (0.05 to 1.10 per cent.) the retina separates from the swollen layer of the rods and cones and the layer of outer granules, and splits with great readiness into three laminae. The innermost of these is composed of the optic fibre layers, to which here and there a ganglion cell is adherent. The middle lamina is composed of a layer of grey substance, in which a large number of ganglion cells are imbedded together with the adjoining part of the internal granule layers. The third and outermost lamina is composed of a part of the internal granule layer, together with the intergranule layer. Intercalated in the first named lamina the authors find numerous branched connective tissue cells closely resembling the interesting cell—elements described by M. Golgi in the central organs of the nervous system. In the second lamina these connective tissue cells are likewise very frequent. The intergranule layer of the third lamina consists chiefly of large cells of very irregular form. They are so flattened as to form very thin transparent lamellæ of homogeneous or finely granular aspect and very delicate margins. Their processes are extraordinarily numerous, which appear to be for a considerable distance mere prolongation of the cell body; but their extremities are highly refractile and homogeneous, and present varicosities like those of the optic fibres. The processes of adjoining cells anastomose freely and form a compact network or felt. Besides these typical cells other smaller but likewise flattened cells are found in the intergranular layer. These are highly granular and have fewer processes.

Regeneration of the Eyes in the Crab.—At the meeting of the Académie des Sciences of Paris, 27th January, 1873, M. Chautran read a paper detailing some experiments which he had made, in M. Coste's laboratory, upon the regeneration of the eyes of the crab. Considerable differences occur in the perfection of the regenerative process, and depend both on the age of the animal and the relation of the operation to the period of moulting. After the eyes had been removed from a crab one year old, and captured in August, just after the moulting of the shell, they were perfectly restored, the new ones assuming the normal form and functions. If, however, the operation be performed on one taken in the month of May before moulting, the process of regeneration is seriously interfered with by the casting of the skin; the eye is then regenerated of abnormal form and size. In adults, again, the new organ is very imperfect.

The Poison of Pahonim.—This poison, obtained in the Gaboon district, acts, according to M.M. Carville and Polaillon,* extremely energetically upon the heart, five milligrammes of the impure alcoholic extract being sufficient to kill a dog weighing fifty-four pounds. It produces death by arresting the action of the heart, and this effect is produced by the abolition of the contractility of the cardiac musculature in the first instance and subsequently of the other muscles. When introduced into the pericardium it stops the action of the heart more rapidly than when the same quantity is injected. It does not abolish the excitability of the nerves. It kills without apparently affecting either the great sympathetic, the encephalon, the spinal cord, or the pneumogastric. It acts feebly on a curarized frog, but there is no antagonism between the curara and the poison. It acts less swiftly by absorption through the stomach than by cutaneous absorption. As compared with digitaline and antiarine, the oily and uniform extract of the poison acts more rapidly than the same weight of the crystallized principles of digitalis and of the *Upas Antiar*, but the marked effects are later in appearing. It interferes with the movements of the heart of the snail and ends by killing it, whilst this effect cannot be produced by digitaline. It causes vomiting in the higher animals.

Action of Muscles determined by Electricity.—In a recent number of the *Mouvement médical* (see abstract in the *Medical Record*, March 5th, 1873) Dr. Onimus gives the results of some experiments he was permitted by the authorities to make on the body of a criminal who had been guillotined. He found that by acting upon the intercostal muscles the external intercostals elevate the ribs, while the internal intercostals depress them. This is best seen when the upper rib of the intercostal space which is faradized is fixed; the lower rib is then raised, while if the internal intercostals be faradized it remains in the same position. The action of the external seems to be more powerful than that of the internal muscles. The Peroneus longus depresses the internal edge of the foot and acts slightly as extensor and abductor of the foot, as shown by Duchenne, of Boulogne. M. Onimus was unable to efface the vault of the sole of the foot by the action of the tibialis anticus. Muscular contractility is not lost simultaneously in all the muscles. The first muscles to lose their excitability are the diaphragm and the tongue, and after them come the facial muscles. The masseter retains its faradic excitability longer than any other muscle of the face. In two, and a half to three hours after death the contractility is quite lost in all of them. In the limbs the extensor muscles go first; the flexors retain their sensibility about an hour longer. Five or six hours after death the muscles of the trunk still answer to faradization; the abdominal muscles are more especially tenacious in this respect. This corresponds to the fact that in more or less general palsies these muscles are the last to become affected, and it is well known that in many forms of paralysis the extensors suffer more severely and sooner than the flexors. As the muscular contractility becomes enfeebled the way in which the contraction presents itself becomes altered. The substance of the muscle appears to rise first at the points of contact with the electrodes, while the intermediate part responds very slowly; it gradually declines, and in time ceases to answer at all, although a response still takes place at the electrodes. At this stage the muscles do no longer answer to percutaneous faradization, but may still respond to the same stimulus directly applied to their tissue.

The Innervation of the Lacrymal Gland.—This subject has recently been investigated by Dr. Demtschenko, who has published his results in *Pflüger's Archiv* for September, 1872. His experiments were conducted on dogs, cats, and rabbits rendered insensible by means of morphia. The stimulus applied was an induced current of electricity. The quantity of fluid secreted by the lacrymal glands was estimated by the number of square centimeters of blotting paper that were moistened. Some differences in the mode of experimenting were found to be required in the different animals. In the dog and cat the lacrymal nerve could be reached from the orbit, but in the rabbit the skull had to be opened. M. Demtschenko found that no influence upon the activity of the lacrymal gland was exerted by the temporo-malar nerve, but the secretion was augmented by irritation of the sympathetic nerve. Irritation of this nerve renders the conjunctiva moist even when the lacrymal gland had previously been excited. The increased flow of tears which follows irritation of various cranial nerves, such as the frontal, infraorbital, nasal, lingual, glossopharyngeal, and pneumogastric, is not interfered with by section of the sympathetic, but is immediately checked by section of the lacrymal nerves. Chloroform narcotisation does not prevent the manifestation of this reflex action. Some differences are presented in the character of the secretion according to whether the sympathetic or the fifth nerve is irritated, being cloudy in the former case, limpid, clear, and abundant in the latter. The sympathetic nerve seems to maintain the normal degree of moisture of the eye, and the fifth the flow of tears, since in cases of paralysis of the latter nerve the conjunctiva remains moist, but the power of shedding tears is lost. Ligation of the carotid artery materially diminished, whilst ligation of the jugular vein augmented, the flow of tears following irritation of the lacrymal nerve. All conditions producing dyspnoea led to increased flow of tears.

Function of Lingual and Chorda Tympani Nerves.—The lingual of the fifth pair of nerves has always been regarded as a purely sensory nerve. It has lately been shown, however, that after section of the hypoglossal or proper motor nerve of the tongue, stimulation of the lingual causes movements of the tongue. M. Vulpian, who has recently studied this subject, has laid the results of his investigations before the Académie des Sciences, at the meeting held on the 20th January, 1873. M. Vulpian satisfied himself that some of the fibres of the chorda tympani nerve terminate in the submaxillary gland; but that others are certainly distributed to the tongue. He ascribes to them the singular motor power which the lingual appears to acquire after the section of the hypoglossal. He is therefore still of the opinion that the lingual is a purely sensory nerve, but he is unable to explain why the fibres of

* M.M. Carville et Polaillon On the Poison of Pahonim. A Paper read before the Society of Biology of Paris, and printed in abstract in the *Revue scientifique*, Vol. ii. Ser. ii., p. 537.

the chorda should apparently acquire a motor power after the section of the hypoglossal.

Geology.

Mammoth Remains in Wrangel-land.—In 1872 a party of Americans, led by F. Pavy, left San Francisco to endeavour to reach Wrangel-land, in the Arctic Sea. They landed near the mouth of a large river running from the N.W., and about eighty miles inland observed many indications of Mammoth remains. On clearing away the snow from one of the spots the whole of a well-preserved animal of this genus was exposed to view. The head was beset with long thick white hair, and the tusks, eleven feet eight inches in length, were curved backwards towards the eyes. The animal was in a kneeling position, the hinder part of the body being deeply buried in the snow, and in such an attitude as it would take if it had died whilst endeavouring to extricate itself from the bog. In its stomach were found bark and grass. These remains were distributed for miles over the plain, and were so abundant that it appeared as if a numerous herd had perished there. The place swarms with polar bears, which live upon the bodies.—(*Verhandl. der Geolog. Reichsanstalt zu Wien.* 1873. No. 4, p. 71.)

Quaternary Fossils of Louverné, Mayenne.—M. A. Gaudry (*Compt. Rend.*, 1873, vol. 76, 657) has examined a number of fossils found in a cave in the carboniferous limestone at Louverné by M. Cellert. They consist of four human molars belonging to as many individuals of different ages, the upper portion of a humerus of a man of large stature, a horn of reindeer with an incision evidently made by human hands, and numerous bones which are referred to the following species, *Hyæna spelæa*, a large *Canis vulpes*, *Rhinoceros tichorhinus*, *Equus caballus*, *Tarandus rangifer*, and the bison. Most of the bones were broken and had been much gnawed by animals. At a distance of 800 mètres from this cave, and in the same rock, a cavity was broken into which was filled with yellow earth, rolled pebbles, large blocks of limestone, and a great many bones. The latter are characteristic of the mammoth epoch, and in addition to the species found in the cave consist of *Felis spelæa*, *Mustela foina*, *Melis taxus*, *Arctomys marmotta*, a large hare which may be either the *Lepus timidus* or *L. variabilis*, *Sciurus vulgaris*, *Elephas primigenius*, *Sus scropha*, a stag as large as the *Megaceros Hibernicus*, some bovidæ of the same size as those named *Bison prisus* and *Bos primigenius*. M. Milne-Edwards has recognised among the bird remains the genera *Anser*, *Mergus*, *Nictea nivea*, two species of *Anas*, and a femur of an unknown species of the hawk family larger than the buzzard and smaller than the *Aquila audax*. The mammifers were chiefly recognised by the teeth, the fragments of the limbs and particularly the vertebræ being so gnawed by hyenas and other animals as to be almost indeterminate. From the prevailing longitudinal fractures in the bones M. Desnoyers and others are of opinion that they are the remains of human feasts, but M. Gaudry considers that having regard to the very numerous marks of the teeth of animals it would be rash to attribute them to human agency.

The Rocks of Griqualand West.—Dr. E. Cohen in his second letter to Prof. Leonhard (*Jahrbuch für Mineralogie*, 1873, part i., p. 52) gives a brief account of the rocks of Griqualand West. In the immediate vicinity of Hopetown the prevailing rock is of a greyish green colour and fine-grained to compact texture, not admitting of a ready determination of its mineral constituents. It is largely developed along the line of the Vaal, being in some places amygdaloidal, and forms high ranges and low plateaus very distinct from the table mountains and kopjes of the Karoo formation. Near Klipdrift a large-grained rock makes its appearance consisting of hornblende and a triclinc felspar, with ilmenite and a little quartz. It bears great resemblance to many of the diorites of Alsace and the Odenwald, to which group, it is probable, the close-grained rock will be found to belong. Dr. Cohen regards the crystalline variety as of later date than the close textured, having observed it near Klipdrift overlying shales and to be traversed by vein-like masses of conglomerate, and near Eskdale on the Orange River it covers and is covered by thick deposits of quartzite sandstone, proving its intrusion during their deposition. On the other hand the compact "Vaal rock" never overlies any sedimentary or other beds in the large district already examined. The sedimentary rocks are quartzite sandstone, slaty clay and conglomerate, limestone with laminated siliceous and marly bands, and a so-called jasper-slate; no fossils have yet been observed in any of them. Marly slate, with siliceous limestone overlying it, constitutes the plateau upon which Griqua-Town is situated. It runs parallel with the Vaal and the Hart rivers for 150 miles, the whole of the intervening plain being covered with thick deposits of conglomerate and the ever-present calc-tuff. The jasper-slate rises above Griqua-Town, and Dr. Cohen regards it as a continuation of that of the Asbestos mountains, and to be a completely altered sedimentary deposit. It contains bands of magnetite and fibrous quartz, but the crocidolite of the former locality appears to be wanting.

The Granulite of Auerswalde.—The granulite rock of Auerswalde, in Saxony, consists of normal granulite, which is made up of orthoclase

and quartz, with accessory garnet and kyanite, traversed by bands of "trap-granulite," which is a mixture of a triclinc felspar with quartz, magnetite, and a green, mica-like mineral. This interlamination, which was pointed out by Stelzner as evidence of the metamorphic character of this rock, is regarded by Prof. Naumann (*Jahrbuch für Mineralogie*, 1872, Part 9, 911) as strong evidence of its eruptive origin. After describing the relation of the granulite to the mica-slate, as observed in several quarries and escarpments in the Chemnitz valley, between Wittgensdorf and Garndorf, he proceeds to compare the alternations of varieties of this rock with modern eruptive masses that have been met with in the Island of Ponza, at Basiluzzo in the Lipari Islands, at the Cerro de las Nabajas, Mexico, the perlite district of Hungary, and the well-known Piperno, near Naples, &c., all of which exhibit alternations of beds or sheets of two dissimilar varieties of the same lava. Still stronger indications of the eruptive origin of these gneissoid rocks are furnished by the fragments of mica-slate, which often occur in the granulite, with their parallel lines of lamination folding over the irregular surfaces of the angular fragments, and producing in the granulite an undulating appearance; similar evidences of flowing-over wedge-shaped projections of mica-slate, often presenting nearly perpendicular sides, occasionally exhibit themselves in the quarries of the district.

Prof. Fr. Müller's long expected work, *Allgemeine Ethnographie*, will be out in a few days at Vienna. From the many-sided learning of the Vienna professor it may be inferred that it will make an epoch, as Prichard's *Natural History* did in its time.

M. Gaidoz is engaged on a work on the Slavonian race in the German Empire and on the German race in Russia, being the enlargement of two lectures of his on the ethnography of Europe which he teaches at the Paris École Libre des Sciences Politiques.

The only Norwegian who has ever attained eminence by writing on general physics, Professor Hartwig Christie, has died suddenly in Christiania. He was born in 1826.

New Publications.

- ACADÉMIE ROYALE DE BELGIQUE. Centième Anniversaire de Fondation (1772-1872). Tome premier et tome seconde. Bruxelles: Hayez.
- BAILLON, H. Histoire des Plantes. Monographie des bixacées, cistacées, et violacées. Paris: Martinet.
- BISCHOFF, T. L. W. v. Anatomische Beschreibung eines microcephalen 8-jährigen Mädchens. München: Franz.
- COOKE, M. C. Manual of Botanic Terms. Williams & Norgate.
- COTTY, E. Description du musée d'histoire naturelle et du jardin botanique et zoologique de Tours. Amiens: Lenoe-Heronart.
- DAMMANN, C. Anthropologisch-Ethnologisches Album in Photographien. 1^{re} Lieferung. Berlin: Wiegandt und Stempel.
- DE SEYNES, J. Expériences physiologiques sur le pencillium glaucum. Paris: Martinet.
- DEBAT, L. Essai sur la constitution de la matière et l'essence des forces dans l'ordre physique. Lyon: Regard.
- DE GIRARD, J. Les matières glucogènes et les sucres au point de vue chimique et physiologique. Montpellier: Boehm.
- FRITSCH, A. Cephalopoden der Böhmischen Kreideformation. Prag: Rziwnatz.
- GERMER-DURAND, E. Découvertes archéologiques faites à Nîmes et dans le Gard pendant l'année 1870. Nîmes: Clavel-Ballivet.
- HANDELMANN, H. Die amtlichen Ausgrabungen auf Sylt, 1870, 1871, und 1872. Kiel: Schwes.
- HILLEBRAND, K. Frankreich und die Franzosen in der zweiten Hälfte des 19ten. Jahrhunderts. Berlin: Oppenheim.
- HILGER, A. Mittheilungen aus dem chemischen Laboratorium von Dr. Hilger. Würzburg: Stuber.
- KÖHLER, II. Die lokale Anaesthesirung durch Saponin. Halle: Pfeffer.
- KORNHUBER, A. Ueber einen fossilen Saurier aus Lesina. Wien: Hof- und Staatsdruckerei.
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Philology.

Early Eastern Geography.—*Bibliotheca Geographorum Arabicorum.*—Edidit M. J. De Goeje. Pars secunda. Viæ et Regna. Descriptio ditionis Moslemicæ, Auctore Abu 'l Kâsim Ibn Haukal. Lugduni Batavorum : apud E. J. Brill. 1873.

IN accordance with Prof. De Goeje's promise, Ibn Haukal now follows Istakhrî as the second volume of the *Bibliotheca Geographorum Arabicorum*. As we showed at the time, according to De Goeje's researches (*Academy*, Oct. 1, 1871), the work of Ibn Haukal is an enlarged and corrected edition of Istakhrî's book. The present edition enables every one who knows Arabic to verify for himself the relation of the two geographical works. We see that Ibn Haukal has incorporated almost the whole of Istakhrî, more or less literally, in his own work without distinctly stating the fact : the ideas of the time respecting literary property differed essentially from those now prevalent. But he has made so many trifling alterations in the text of his predecessor, even when adopting it as a whole, that it would be extremely difficult, if not impossible, to show the difference between the two texts in a single edition with the help of critical notes and variants. It is far more convenient to be able to lay the two texts side by side, even in passages where they agree in essentials. A formidable critical apparatus is still, however, made necessary by the differences between later versions as well as by the carelessness of copyists. But the later work has very decided points of superiority to its original. Ibn Haukal had seen much in the course of his travels, and many of the results of his observations are included in the work. The most cursory inspection shows us how much more extensive some sections are than in Istakhrî (in connection with which it may be remarked that in the edition of Ibn Haukal there is decidedly more text to a page than in that of Istakhrî, where the critical portion occupies more space), and these additions are for the most part valuable. Some of the Western countries which are only scantily noticed by Istakhrî are described in greater detail by Ibn Haukal ; as for instance Egypt and the rest of North Africa, Moslem Spain, and the Christian coasts of the Mediterranean. The account of Mesopotamia has also been a good deal enlarged, and unfortunately in a less degree than of Syria and Babylonia (Iraq). Ibn Haukal, amongst other points, had taken much pains to procure careful information respecting the finances of different

countries and provinces, which are not wanting in sad indications of the decline of material prosperity. For most readers his lists of figures are certainly rather unintelligible ; but if a competent scholar were to undertake to examine more nearly into the nature and history of the state finances in the first centuries of Islam, he would find much valuable matter amongst the *data* furnished by Ibn Haukal as well as Belâdhori and other writers. Ibn Haukal pays particular attention to political conditions, and in this way furnishes a very welcome supplement to the historians. In his time (middle of the tenth century, A.D.) it might appear to a careful observer as if the might of Islam were drawing to its end. With the abasement of the Caliphate, which had already lasted for a century, the strength of the Arabs was really broken. Countries which had been conquered in the first centuries after the Hejira were lost to the Greeks or were devastated by their incursions. The leaders of Turkish mercenaries, Persian adventurers, and small Arabian dynasties, contended for the countries on the banks of the Tigris and Euphrates. Amongst the latter the Hamdanides stand pre-eminent. We are accustomed to regard the most intellectually distinguished member of this stem, Saif-Addaula, as the glory of his people, the light in which he is celebrated by the court poet Motanabbi, while the literary tradition of the Arabs is also very favourable to the generous prince, protector of the *beaux esprits* of his time, and himself possessed of high accomplishments. A very different account, both of him and the other Hamdanides, is given by the sober contemporary Ibn Haukal : how they ruined the cities by their extortions, forced the inhabitants to emigrate, or actually drove them into the arms of the Greeks and of Christendom. If one takes the bare facts set down by the chroniclers, the wars of the Hamdanides against foreign enemies and against each other, and their faithless policy, one is compelled to admit the justice of Ibn Haukal's severe verdict, even though it might be urged in excuse of Saif-Addaula that a petty prince who had constantly to contend for existence against both Greeks and Moslems could not be very scrupulous as to the choice of means for replenishing his war-coffers ; while his brother, Nâsir-Addaula, was compelled to follow a system of ruinous exactions by the sole weight of the tribute to be paid to Bagdad. But, everything considered, we have here a picture of a deplorable state of things of which we have no conception at all in reading Motanabbi, and we can understand the melancholy tone which appears in Ibn Haukal's description of northern Syria and Mesopotamia. He could not know that the Greek Empire was too miserably weak to maintain and follow up its advantages over the Moslems, and that Islam was about to derive new strength, at least for conquest and destruction, from the influx of the Turkish hordes. Ibn Haukal, however, is a zealous partisan of the Fatimides, whose power was just attaining fuller development. This house, whose descent from Ali was in all probability mythical, understood better than most of the other real and imaginary Alides how to lay the foundations of a State and cause it to flourish. We cannot, therefore, take it amiss that our author turned towards them. But I am inclined to doubt whether he himself was at all a Shîte so far as religious matters were concerned ; expressions like that of "so-called caliphs" for the Abbasides are at any rate to be regarded rather as an affectation than as meant seriously. What Ibn Haukal has to say about the non-Moslem world, except so far as it is to be found in Istakhrî as well, is not of much special value, though even here a few interesting particulars may be met with, as for instance those relating to the great conquests of the Russians on the East and South (p. 286).

Though Ibn Haukal's changes in the text of Istakhrî are

generally for the better, this is not the case quite always. Thus Istakhri says that the Kurds assert themselves to be of Arab descent (p. 115); he plainly does not believe it, but Ibn Haukal supports the absurd claim by the authority of the learned Ibn Doraid, who ought not to be contradicted (p. 187); it looks as if he had here wished to display his own learning.

No doubt Ibn Haukal would have considered it as one of the chief superiorities of his work over that of Istakhri that his maps were better. But on this point we could only judge if the original maps were before us, for they have been much disfigured in different MSS. We observed in speaking of the edition of Istakhri that Prof. De Goeje had done well in omitting the maps altogether.

Ibn Haukal's style is not always to be commended. He often expresses himself obscurely, and though, after the intolerable fashion of learned Arab authors, he frequently speaks in artistic flourishes with rhymes when simple prose would be more to the purpose, yet he has some peculiarities of style which are actually against the rules of good Arabic. Amongst these I reckon his rather frequent use of *ghair* with an indeterminate substantive in the sense of "several:" viz., *ghairu ainin* (p. 150) "not a spring," in the sense of "not one spring," that is to say "several springs."

Like the original work of Istakhri, Ibn Haukal's version has been in many respects altered and abridged; evidence of this is given partly by the Arabic MSS. themselves, partly by Persian translations. It is not always easy to say with certainty which is the text of Istakhri, which of Ibn Haukal, and which of the later editor. De Goeje has proceeded in this matter, as ever, with the greatest caution, though he would not claim to have distinguished with perfect exactitude between the two original texts. By the very ample critical apparatus afforded he enables the qualified reader to form his own opinion. We are particularly grateful to the editor for giving the in parts very interesting additions made to our book in a fresh version of two hundred years later, which is contained in a MS. at Paris. This reviser observes, for instance, with respect to many places of which Ibn Haukal says that they have fallen into decay, that in his time—and he generally adds the date—they are again in a flourishing condition. But this writer must have had yet another text of the original before him, and one with considerable differences from the common form. It is particularly strange to find at the beginning of the Parisian MS. a warm eulogium on Saif-Addaula, which is entirely at variance with many other passages of the book. It seems to me a question whether this passage may not have belonged to an earlier version by Ibn Haukal's own hand. The matter, at any rate, is worth investigation.

We await anxiously the third volume of this series, which is to contain Mokaddasi, a publication by which Professor De Goeje will be doing as meritorious service as by that of Baladhori, Istakhri, and Ibn Haukal.

TH. NÖLDEKE.

Fridankes Bescheidenheit. Von H. L. Bezzenberger. Halle: Verlag des Waisenhauses.

Kudrun. Hgg. und erklärt von E. Martin. Halle: Verlag des Waisenhauses.

WHEN we consider the great progress which the study of modern German literature has made in this country during the last few years we cannot but be struck by the almost total neglect of the Middle High German literature of the twelfth and thirteenth centuries. And yet the earlier is at least equal in interest to the later period, although its merits are of a totally distinct order—whence, indeed, its great value

as a corrective and supplement to the modern literature. It may safely be said that any one who acquires a thorough—not a merely superficial—knowledge of the two periods will possess a breadth and fulness of literary culture otherwise attainable only by a laborious study of several distinct languages. The nearness of the two periods, while sparing the student to a great extent the drudgery of learning a new vocabulary and grammar, yet offers peculiar difficulties, arising from this very similarity. It often happens that a word in the older language differs in meaning from its modern equivalent so slightly as often to entrap the superficial student into hastily assuming a complete identity of meaning, the result being a ludicrous mistranslation. The study of MHG. is thus an excellent training in the differentiation of word-meanings.

The title of the first of the two works now under discussion is a good example of this change of meaning. "*Bescheidenheit*" in MHG. has nothing to do with "modesty;" it means simply "wisdom," or rather "sagacity," afterwards "moderation," "reasonableness," whence the modern signification. "*Fridankes Bescheidenheit*" means therefore "Wisdom of Free-thought," the "wisdom" consisting in a collection of short proverbial sentences in rhymed metre, whose subjects are drawn from every sphere of practical life, from religion and the world of nature. Who *Fridanc* himself was has long been a disputed question. It was at first assumed that *Fridanc* was an assumed name, and the first critical editor, Wilhelm Grimm, conjectured that the real author was the great lyric poet Walther von der Vogelweide. This theory was never generally accepted, and after the masterly summary of the evidence on both sides given by Bezzenberger in his introduction, its untenability must be regarded as put beyond a doubt. Indeed when we see how fundamentally distinct the genius of the two poets is, and how impossible it is to reconcile the purely objective and practical tone of the *Bescheidenheit* with the intense subjectivity, passion, and idealism of Walther, we can only wonder that such a hypothesis could ever have entered the head of so sagacious a critic as W. Grimm. The scanty evidence there is tends to show that *Fridanc* was the real name of the author, that he was of citizen family, led a wandering life, visiting Italy and the Holy Land, and died at Treviso about 1240. It only remains to be said that the present edition is, with its elaborate introduction, rhyme-index, and commentary, suited alike for the critical and the general reader. A better work for any one who is beginning the study of Middle High German could hardly be found.

With the *Gudrun* we enter on a totally new field of Middle High German literature, the national epos. It is characteristic of the wonderful breadth and many-sidedness of the literature that it possesses two distinct classes of epic poems—the popular, founded on the national traditions, and the "courtly" (*höfisch*), whose subjects are taken from the Old French epics. Of the popular epics the *Nibelungen* unquestionably deserves the first place, the *Gudrun* coming second. As far as its internal structure is concerned the *Nibelungen* stands without a rival in general literature for grandeur of conception, tragic power, and fine development of character. Formally, however, it is far from perfect, having suffered severely from the interpolations and alterations of meddling scribes. The same is the case, only in a still higher degree, with the *Gudrun*, which has been preserved only in one very corrupt MS. of the sixteenth century. Enough, however, remains to make the *Gudrun* one of the most fascinating of all MHG. epics. It no doubt owes much of its charm to its peculiar relation to the *Nibelungen*, which is exactly parallel to that of the *Odyssey* to the *Iliad*, although the story of *Gudrun's* unshaken fidelity to Herwig, on which

the poem mainly turns, is told with a purity and elevation of feeling to which the Greek was a stranger. The present edition, which forms the second volume of Zacher's Germanistische Handbibliothek, gives the readings of the MS. at the foot of each page together with critical notes. The whole work is better adapted for the advanced student than for the beginner, who cannot have a better edition than that of Bartsch in the "Deutsche Classiker des Mittelalters" (see *Academy*, vol. iii. p. 221). H. SWEET.

New Publications.

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 BAUMGART, H. Pathos u. Pathema im Aristotelischen Sprachgebrauch. Königsberg: Koch.
 KÖLBING, E. Untersuchungen über den Ausfall des relativ-Pronomens in den germanischen Sprachen. Strassburg: Seitz und Miller.
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 MURRAY, J. A. H. Treatise on the Dialect of the South of Scotland. (Transactions of the Philological Society for 1870-2. Pt. ii.)
 NEUMANN, W. Melanges Philologiques. I. Prononciation du C Latin. Paris: Sandoz et Fischbacher.
 POTT, A. F. Etymologische Forschungen. 2^{te} Auflage. 4^{ter} Band. Detmold: Meyer.
 SAUPPE, H. Commentatio de amphictionia delphica et hieromnemone attico. Göttingen: Dietrich.

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No. 70.]

REGISTERED FOR

TUESDAY, APRIL 15, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Collection of Hungarian Popular Poetry. [*Magyar Népköltési gyűjtemény.*] Edited for the Kisfaludy Society by Ladislaus Arany and Paul Gyulai. Pest: Athenæum.

THE two volumes before us appear as the beginning of a new series of popular Hungarian compositions both in verse and prose—ballads, songs, tales, &c.—and the editors express a hope that collectors may still send in additional specimens in order to render the collection as complete as possible. This collection is the second that has appeared under the patronage of the Kisfaludy Society: three volumes edited by M. Erdélyi were published in the years 1846-48. To M. Erdélyi great credit is due as the first collector on any scale of the products of the Hungarian popular muse, but as might be expected his collection left great room for improvement as regards the critical arrangement and appreciation of his materials.

Since that date several partial collections have been published, some of them having a local character, such as M. Pap's collection in the Palócz dialect. Of all these partial collections the *Székely Wild Roses* of M. Kriza, published in 1863, was perhaps the most important. We believe that the materials for a second volume of the *Wild Roses* have been collected, and hopes are held out of its speedy publication. It appears from this that the Hungarians do not feel themselves so poor in fable and song as to necessitate a concentration of their forces. We suppose it is a regard for the coming volume of the *Wild Roses* that has excluded from the present collection both songs and ballads communicated by M. Kriza to various Hungarian periodicals.

Of the two volumes before us the first is a general collection, apparently intended to be representative, of pieces collected by different persons from all parts of the country, while the second is individual and local, being a collection made by Mr. Charles Török in the county of Csongrád, which may be considered as a fairly typical specimen of the Alföld, or Great Plain.

These two volumes contain between them fifteen Christmas mysteries and Twelfth Night games; one hundred and fifty ballads and narrative poems, amongst which, how-

ever, the true ballads form a minority; about five hundred songs, which form both in quantity and quality the main strength of the collection; thirty-six tales; besides an interesting collection of riddles, nursery rhymes, and children's games. It will thus be seen that the Hungarians cannot compete in the matter of folklore with such encyclopædic peoples as the Germans or Russians; but if we take into account the comparative weakness of their numbers it certainly says a great deal for the fertility of the popular imagination that so large a collection appears after so many have preceded it.

A collection of popular compositions naturally appeals to more than one source of interest. It has not only an æsthetic or purely poetical value, but at the same time occupies an important place in the history of literature. Again, as preserving or representing in their most living forms the dialectical varieties of the language, they acquire a philological value. This perhaps especially applies to those compositions which are handed down by the strictest link of tradition, such, for instance, as nursery rhymes and the verses used by children at play. Lastly, and in the opinion of many this is their most real as it is their most human importance, they reflect more faithfully than anything else the peculiar character of the people which has composed and preserved them. As M. Erdélyi has observed, the popular poetry is the guide to the psychology of the Hungarian people. In this respect the songs are the most important as they are the most original of the people's compositions. The tales on the other hand are the least so, their subjects in almost all cases being identical with the well-known tales of other peoples, the peculiar handling of the subject and manner of telling the story being all that is distinctively Hungarian about them.

The amount of importance to be attached to the Christmas mysteries and Twelfth Night plays is very satisfactorily defined in a long explanatory note of M. Gyulai. He traces the course of development of the mysteries in the countries of Western Europe. He shows how from being a somewhat dramatic portion of divine service enacted about the altar by the clergy it became an imperfect drama, still retaining its liturgical character, performed outside the church by non-clerical actors. In its third stage of development the dramatic

elements of the mysteries developed themselves at the expense of the liturgical until the mystery itself became by gradual transition the profane drama. The veteran historian of Hungarian literature, M. Toldy, has maintained that the same process of development took place in Hungary. M. Gyulai, with that respect for recognized authority which is such a striking feature in Hungarian literary circles, does not directly controvert this view, but merely throws out as pertinent to the subject a few observations which will probably prove convincing to all non-Hungarian readers.

That the liturgical mystery existed in Hungary is not proved by any direct historical evidence; but two circumstances render it more than probable. In the first place the liturgy of the Latin Church in Hungary was the same as in other countries of mediæval Europe; in the second, the remains of the mysteries printed in the collection before us evidently prove their original liturgical character. But of the existence of the mystery drama, that is the mystery in its third stage of development, we have not only no historical evidence, but we have also no remains of such dramas handed down to us. Besides, M. Gyulai observes that even at the present day the Hungarian people do not show as much taste for dramatic performances as either the Latin or Teutonic nations; that the ceremonies of Magyar heathendom do not appear to have been so dramatic in their character as those of the Teutonic peoples; and that the heathenism of their ancestors has left scarcely any trace amongst the Magyars, after their conversion to Christianity. In mediæval, as in modern, Hungary the citizen class flourished to a less extent than in Western Europe. But it was just in the largest towns where the citizen class had most influence that the mystery attained its fullest development. Further it is to be observed that where the dramatic mystery flourished it was followed by a marked development of the modern Christian drama: in other words, the third period of the development of the mystery may be considered as a necessary consequence of the second. Now in the sixteenth and seventeenth centuries we find in Hungary only the didactic drama, a modification of the mediæval "morality," and that, too, imported partly by the Jesuits, partly by Protestant pastors who had studied in foreign universities. With regard to the earliest secular drama, "The Betrayal of Balassi Menyhárd," it seems by no means certain that it was ever intended for the stage, being rather a satire written in the form of a dialogue. The fact that the secular drama in Hungary did not stand in connection with the mystery is in itself sufficient proof that the dramatic mystery could not have flourished there as in the West of Europe. All the above considerations taken together point to the conclusion that the mystery in Hungary remained in its first stage, while in the West it had advanced into the second.

It is to be observed that all the liturgical mysteries that have come down to the present day have reference to Christmas or Epiphany. But several traditional anecdotes prove that similar mysteries were formerly played representing the Passion and Resurrection. To these latter, however, the peasantry seem not to have been so much attached, probably because they interfered with their labours in the fields, while those of Christmas and Epiphany fell in the winter season of enforced leisure. The specimens here preserved have naturally suffered a great amount of change since they were driven from the Church to take refuge amongst the people. They exhibit various forms, some simpler, some more artificial, the *naïveté* of the true peasant, and the pedantry of the village schoolmaster; in some only Catholic hymns occur, in others Protestant, in others again both. Here we find fragments of popular

songs, there verses from poets of the last century; sometimes the Latin words of the liturgy have remained, in others verses composed in the most modern Hungarian have been interpolated; often a comic effect has been sought by the introduction of Slave or Rouman words and phrases. But in spite of later corruptions the original compositions of the liturgical mysteries can be distinguished, agreeing in the main points with those of mediæval France and Germany.

Next to the mysteries some of the ballads have the greatest antiquarian interest, dating as a few of them do from the periods of Turkish invasion and the civil wars of the "*Kuruc* world." On the whole, however, the traditional poetry of the Hungarian people is in consideration of its extent not rich in historical or in genuine war songs; this has called forth expressions of surprise from critics who remember the proverbial "thousand years' struggle for existence." By way of explanation it is perhaps sufficient to refer to the fact that from 1711 to 1848 the struggle for existence, often very languid in its character, was maintained not in the battle-field, but in the debates of the Diet and the County assemblies; that the foreign wars of this period were generally dictated by the interest of the "German;" that there was no national army, while the Hungarian regiments had to some extent the character of penal institutions; that the gentry were extensively denationalized, and the traditions of the past were discouraged by the Government. To the fact that these influences had less effect in Transylvania than in Hungary Proper may be attributed the difference observed by M. Gyulai, between the Hungarian and the Transylvanian, especially Székely ballads in the collection, both as regards form and subject. The scenes in which the former are laid are for the most part cottages, lonely farms, or in the more exalted cases the fairyland of the popular tales; while the latter have a certain historical background, and relate to knights, castellans, or the so-called "free heyducks." And the difference of form may be considered to correspond to the difference of subject, in the Hungarian ballads the lyrical elements predominating, in the Transylvanian the epic. Thus the former are generally more modern in their prosody, and are written in rhymed stanzas, while the latter content themselves with the more primitive rhythm produced by the division of lines, alliteration, and a peculiar balance of the accent and the ideas.

This rhythm of the ideas is found produced in three ways: by means of opposition, accumulation, and parallelism.

The simplest form of opposition is where the beginning and end of each verse stand in contrast to each other, as in the instances cited by M. Gyulai:—

Lelekem a lelkednek	My soul to thy soul,
<i>S mennyeiben vigadjon.</i>	<i>And let it rejoice in heaven,</i>
A hercegné asszony	The lady duchess,
<i>Pokolban gyuladjon.</i>	<i>Let her burn in hell.</i>

And again:—

Kit mindig szerettem, jaj be távol estem,
Kit mindig gyűlöltem annak rabja lettem.

Whom I always loved, alas! (from him) I became far distant.
Whom I always hated, of him I became the slave.

But often the opposition is indicated by but one word in a repetition, as in the following passage:—

Dost thou make for me *any* coffin?
I make, my rose, a *marble* coffin.
Dost thou envelope it in *any* linen?
I envelope it, my rose, in a *black* veil.
Dost thou ornament it with *any* nails?
I ornament it, my rose, with *gold and silver*.
Dost thou carry me out with a *few* gypsies?
I carry thee out, my rose, with *royal* princes.

Wilt thou presently ring a *triple peal*?
 I will ring, my rose, *all the sixteen*.
 Wilt thou escort me, my rose, *at least to the gate*?
 I will escort thee, my rose, *to thy abiding resting-place*.

As specimens, of what we have called accumulations we may cite:—

Hadst thou then not a *morsel of bread*?
 A morsel of bread, a *cup of wine*,
 That thou should'st not deliver me into the hands of the Turks?

And again:—

I already became weary of *arising in the morning*,
 Of arising in the morning and *going out to the brook*,
 Of going out to the brook and *washing the bloody clothes*.

The reader will observe that the repetition forms the first half of a verse, and the progression the second, the progression being often rather subjective than objective:—thus in the last quoted passage the brigand's wife dislikes getting up in the morning, shivers at the water's side, and is disgusted at her loathsome occupation.

Of parallelism the instances quoted are perhaps hardly so striking. For instance:—

Boriska, Boriska, *we have come for thy fair daughter*.
 Into the hands of Turks *deliver thy fair daughter*.

Or again:—

We shall find it in the fair ruddy dawn,
 In the fair ruddy dawn, in the clear day-break.

And again:—

For I have at home *my betrothed, my espoused*,
My faithful consort bound to me by a vow.

The peculiar rhythm of thought which has been shown to characterize primitive Hungarian poetry is known to exist in the primitive poetry of other nations.

The songs that live in the mouths of the people may be divided into three classes: those that are of purely popular origin entirely uninfluenced by literature; then those of semi-popular origin composed by half-educated, unknown persons living amongst the people, which the people have accepted generally with some amount of modification, but in which the influence of literature is still more or less discoverable; and, lastly, the songs of recognized poets which have passed into the mouths of the people amongst whom they too, like those of the second class, often suffer some amount of change. *The last class of songs has naturally been excluded from this collection.

To distinguish between the first and second class of songs is as easy in some cases as it is difficult in others. In some the intrusion of literary influence is so obvious that a single glance is sufficient to remove all doubt as to its existence. In some the idea and the form appear equally to owe their origin to literary study, and the language and tune are alone of really popular character. Again, in other cases the language betrays the education of the author, where we encounter expressions elegant and regular but devoid of force and originality, while words are employed in those particular shades of meaning which literary authorities have assigned them.

But still there are numerous instances in which the influence of literature has disguised itself with more or less success. In some songs single stanzas or lines are as unmistakeably popular in their origin as others are the reverse, and it becomes a moot question, for the most part incapable of solution, whether the author of the song took these popular elements from the people, or whether the latter themselves inserted them subsequently to its original composition. As M. Bartulus has observed in his report to the Kisfaludy Society respecting the collection of Hungarian melodies, a "folksong" is not composed once for all, but as it passes from mouth to mouth goes through a process of continual recension.

The surest test of the popular as distinguished from the semi-popular origin of a song is a peculiar expression of simplicity and directness, rather to be felt than defined, and therefore peculiarly difficult to imitate. Another test upon which M. Gyulai relies are certain forms too primitive to invite imitation, one of these is the rhythm of thought, and where this is most strictly observed we may be quite sure of the truly popular origin of the poem. One of the forms which this rhythm takes is that in which the whole song consists of a repetition of the same idea, with modifications gradually increasing its force or definiteness. The following Transylvanian love song may serve as an illustration:—

May God smite
 The house of my beloved!
 Not just the house,
 The dwellers therein;
 Nor all of them,
 Only one of them—
 His own dear father:
 For he tore away from me
 His youngest son—
 If he was his son—
 He was my beloved:
 If he was dear to him,
 To me he was dearer!

Other primitive forms are those in which the same thought is repeated with slight modifications, the feeling or fancy being more or less elevated with each repetition till an unexpected turn of thought concludes the song. A third primitive form is that in which a certain condensed dramatic character is given to the song.

The simplicity and directness which constitute the surest test of the popular origin of a song arise from the substantial identity, nay unity, of the poet and his public. The literary poet necessarily addresses himself to an audience for whom he writes and whom he wishes to affect, and must therefore, however sparing of his words, explain in what character and with what reference to time and place he sings. But the people, singing to itself and for itself, instinctively understands all that is required for the explanation of a song, which can be a mere expression of a feeling, habitual or transient. At the same time, as observed above, there are songs in which corruption and interpolation have by a process of mutual plagiarism between the half-educated and wholly uneducated classes produced such an amalgam of popular and literary elements that it is impossible to assign to either of them the priority.

In like manner it is generally, not to say universally, impossible to discover which is the original version of songs of purely popular origin. A folksong as it passes from mouth to mouth suffers continual change as often for the better as for the worse. In many cases, too, a sort of spurious song is formed by piecing together verses of different songs sung to one common tune. They are to be found even in the best collections, e.g., in those of Erdélyi and Kriza, but the editors of the one before us have made a point of excluding all such accidental accumulations of verses.

ARTHUR J. PATTERSON.

Koberstein's History of German Literature. [*Grundriss der Geschichte der deutschen Nationalliteratur.*] By Augustus Koberstein. Vols. I., II. Fifth edition, revised by Karl Bartsch. Leipzig. 1872.

THE high value of this work has long been recognized by the learned and the general public. It is the first real approach to an exhaustive attempt to depict the historical development of German poetry and rhetoric from a purely scientific point of view, to characterize objectively and realistically the vast intellectual wealth of the German people, so far as it can lay claim to artistic value, in reference to its growth, its significance, and its outward influence, and

this, so far as possible, in the light of contemporary feeling and thought. The author does not aim at giving an independent subjective judgment, or at explaining his subject from within, but he refrains, in compensation, from all those elaborate phrases in which literary historians are apt to envelop the real kernel of the matter, while they substitute, as Faust says, for the spirit of the age "der Herren eigenen Geist in dem die Zeiten sich bespiegeln." Koberstein offers nothing but the collective results obtained by severe and conscientious research expressed in the most concise form. Those who do not like to receive them upon trust, who wish to follow the process by which they were reached and to form their own opinion from the original sources, will find in the innumerable footnotes to the text an amount of bibliographical information such as is scarcely to be met with in any other work of the kind. Indefatigable industry and astonishingly wide reading have brought together everything that has been written upon every controverted point either by specialists or by cultivated laymen down to the smallest newspaper articles, reviews, or occasional critical remarks; no point of view is neglected that the works of the authors themselves, or other written authorities could suggest. It must, however, be admitted that the really oppressive abundance of these notes often interferes with the general view of the whole, and that even the sifting process carefully carried out by the present editor hardly goes far enough to remedy the evil. The new edition, indeed, has one great point of superiority over its predecessors. In these the historical and biographical dates and the various literary criticisms were almost exclusively incorporated in the notes, whereas the text is now recast so as to include them. Another disproportion has also been partially removed; whereas formerly the sixth period, including the latest times, occupied at least three times as much space as the five earlier ones together, the latter now occupy at least two-fifths of the whole, having received material additions, sometimes amounting to reconstruction, by the pen of Prof. Bartsch, as, for instance, the section upon the Nibelungenlied shows.

The line of demarcation in the principal sections has been criticized with some reason, and one point in particular produces a strange impression: contrary to the natural and usual method, the occurrence which had the deepest effect in revolutionizing literary and other relations, the German Reformation, is not taken as the starting point of an epoch, but is included in the fourth period, made to reach from the middle of the fourteenth to the end of the sixteenth century. But this is after all only a matter of external arrangement, concerning which we need not dispute with the lamented author; the other brilliant qualities of his work and the admirable disposition of his bulky and confused materials are a more than sufficient compensation.

Each period is introduced by a general sketch of the political, social, moral, ecclesiastical, and scientific circumstances marking its duration, and their relation to the contemporary literary development. Then follows an account of the language and versification of the period in question, which is based upon the most minute and detailed inquiries and gives an excellent review of the special works bearing on the subject. Lastly the poetry itself is considered, with its separate kinds and forms and its gradual development and increasing cultivation. While in the first period, from the earliest days of German history to the middle of the fourth century (vol. i., 7-15), the origin of the Germans, their early culture, their language and poetry are represented in brief outline, the second—from the middle of the tenth century to the beginning of the twelfth (pp. 16-83)—discloses a vivid picture of the effects on German culture and poetry produced by the migration of the nations and the introduc-

tion of Christianity. The merits of Charles the Great are placed in the proper light; the prime and decay of the monastic and cathedral schools, and whatever else had prominent influence on the development of the national literature, are arranged into an artistic framework, against which we see in clearer relief the shape of the different classes of poetical composition—the popular poetry as well as the ecclesiastical and learned literature of the vulgar tongue. The two other periods contained in the first volume are treated in an equally attractive manner; in the third, from the beginning of the twelfth till towards the middle of the fourteenth century (pp. 84-259), the courtly narrative poetry, the Minnesang, and the great popular epics, the Nibelungenlied, Kudrun, &c., meet especially with thorough discussion; the fourth, from the middle of the fourteenth to the end of the sixteenth century, include the time of the minstrels, the beginnings of dramatic poetry, the revival of classical studies, and a rich prose literature in the field of romance, narrative, fable, legend, and satire. This is the close of the first part, dealing with the heathen and mediæval periods. The fifth division, from the beginning of the seventeenth to the second quarter of the eighteenth century, occupying the whole of the second volume, brings us to modern times, at the head of which Martin Opitz appears as creator and founder.

These few indications touching the form and substance of the two volumes hitherto published may suffice to give an approximate idea of the rich materials worked up in them, and to recommend them to the diligent study of all who are anxious to become thoroughly acquainted with the early literature of Germany. We congratulate Prof. Bartsch on this last production of his uninterrupted industry, and indulge ourselves in the hope of welcoming before long the remaining three volumes, which will include the most glorious period of German poetry, its second classical age. H. ETHÉ.

Notes and Intelligence.

In the *Révue des deux Mondes* (April 1) Lord¹ Dalling's *Life of Lord Palmerston* is reviewed by the Comte de Jarnac, from the point of view of an Orleanist diplomat, whose respect for Lord Palmerston's ability in negotiation is perhaps intensified, but not made more affectionate, by personal recollections of some passages of decidedly sharp diplomatic practice of the kind by which the Foreign Office under his rule was wont to uphold the national prestige. A paper on *La Physiologie de la Mort*, by M. Fernand Papillon, gives a popular account of the distinction between real and apparent death, and the separate and gradual dissolution of the organic and the animal life; but the conclusion is more popular than scientifically precise or intelligible.

Witchcraft and Non-Christian Religions, by A. C. Lyall (*Fortnightly Review*), is an attempt to show, chiefly from experience amongst the more barbarous tribes of India, that the practice of witchcraft is generally independent of the proper local superstition, and is more like rudimentary science than debased religion. The sorcerer relies upon general agencies supposed to be natural though mysterious, and his powers—imposture eked out with a little natural magic and luck—excite the jealousy of the established priesthoods, whose gods are liable to be discredited by such rivalry. A paper on *Ghosts and Goblins*, in the *Cornhill Magazine*, calls attention to a very simple source of superstitious misbelief which has hardly received as much attention as it deserves—viz., the misinterpretation of the senses, or mere inaccuracy of perception, both of which are much commoner than optical delusion, or actual hallucination, while a chance coincidence may make them appear as mysterious.

A volume of historical interest, and containing important details concerning Prussian diplomacy of twenty years ago, has

just appeared at Leipzig, under the title *Aus dem Briefwechsel Friedrich Wilhelms IV. mit Bunsen*. It is edited by Ranke, who accompanies the text with a running commentary of supplementary notes.

Some curious old musical MSS., including the Gospel of St. John set to music, apparently of the fourteenth century, and in good preservation, have been discovered at Harderwijk, in Holland.

M. Ortolan, professor of criminal law at Paris, and author of the well-known work on the Institutes of Justinian, died on the 28th ult., at the age of 71.

In the *Contemporary Review* Mr. W. R. Greg discusses, with special reference to the *History of Joshua Davidson*, the extent to which it is desirable, or possible, at the present day to act literally upon the ethical precepts contained in the Gospels, and decides that non-resistance, almsgiving, and carelessness of the morrow are mischievous, though the spirit in which they were formerly recommended or practised continues as desirable as ever. He points out that the political criticisms in *Joshua Davidson* are both less Christian and less just than the portions bearing on social prejudices and shortcomings.

Art and Archaeology.

The Early Flemish Painters. Notices of their Lives and Works. By J. A. Crowe and C. B. Cavalcaselle. Second Edition. 1872. Murray.

ALTHOUGH put forward as a new edition only, this may almost be considered as a new work, so entirely has it been re-written. The increased interest that is now felt in the subject will doubtless ensure it many more readers than when it first appeared in 1857, and all who know the careful study and scientific observation that the authors bring to bear upon their work will be anxious to learn the result of their latest labours in the field of Flemish art.

The art of the Netherlands exhibits several distinct phases. It is only with the first of these phases, the religious but not ascetic art of the school of Bruges, that MM. Crowe-Cavalcaselle deal; they do not even trace the decadence of the religious spirit and the gradual Italianization of early Flemish painting in the school of Antwerp, a school derived from that of Bruges, but soon departing from its early faith.

The school of Bruges is remarkable as having developed, at a time when Italy was already asserting her predominance, a purely national art. While the painters of Florence, Paolo Uccello, Masolino, Masaccio, and others, were studying the scientific principles of their art, the painters of Bruges were experimenting in the mysteries of colour; for colour from the first to the last in the Netherlands was more loved than form. It is not even yet perfectly clear in what the famed discovery of the Van Eycks consisted, but in some way or another their method revolutionized the whole practice of painting. No fresh light is thrown on this subject in the present work. The authors accept Sir Charles Eastlake's conclusions rather than those of Count Secco Suardi, whose theory is that Van Eyck substituted the fluid oils obtained from linseed and nuts *without* boiling for the more viscous boiled oils previously used.

But it is not the discovery of a better medium, it is the individual genius of the great founders of the school of Bruges that gives that school its claim to distinction and makes the scanty knowledge we have of its history interesting. It is surprising that our knowledge should still remain so scanty, considering the careful investigation to which the archives of the Netherlands have recently been submitted by a number of distinguished archæologists and

historians, all working with the same object of throwing light on the early history of their country; yet even when, as in the volume before us, the results of all their researches in the domain of art have been added together we find it does not after all amount to very much. Since the first appearance of their history, the authors tell us, "criticism and inquiry have enlarged our knowledge of the schools of the Netherlands. Artists whose identity was not established are now familiar, records which seemed to have been lost have been found again, and pictures which were thought to have perished are restored to us." It were strange indeed if such an amount of research as has been brought to bear on this subject had proved entirely fruitless; still it must be confessed we do not find quite as many "discoveries" as we anticipated.

Hubert Van Eyck, the great patriarch of Flemish painting, remains the same, grave, unknown figure as heretofore. It is surmised, certainly, that he may have held some high position in the household of the Comte de Charolois, afterwards Philippe le Bon, at Ghent, for at the death of Philippe's first wife, Michelle of France, sister to the Duke of Orleans who murdered Philippe's father, Jean Sans Peur, at the bridge of Montereau, it was considered a grateful tribute to her memory to grant the freedom of the guild at Ghent to "her favourite painters," the two Van Eycks.

The entry to this effect in the Ghent register is not however without "suspicion of interpolation." With the exception of the grand figures of the upper portion of the altar-piece of St. Bavon, no certainly authentic work has been found of a master who was once "high in honour," and of whom his brother, the better known Jan, recorded "major quo nemo repertus."

In Jan's history the only important fact recently gained is that he spent two years at the Hague in the service of the reckless Jean Sans Pitié, Bishop of Liège. In the list of knights, officers, minstrels, and servants who formed part of the usurping Bishop's court at the Hague, Jan is named as *myns genadichs heeren scilder*—our gracious Lord's painter—and the archives of Holland show that he was in receipt of a regular salary for nearly two years. This was, of course, before he entered the service of Philippe le Bon.

Of Hugo Van der Goes we learn from a passage in a chronicle written at Rouge Cloître in 1500 by Gaspar Offhuys, a fellow novice in that monastery with Hugo, that "he was so celebrated as a painter that it was said his like could not be found even beyond the Alps. . . . Numbers of people of rank, the Archduke Maximilian amongst the rest, constantly came to see him and admire his pictures; and through their intercession he obtained permission to frequent the guest-room and join the strangers' dinner. No doubt he was subject to fits of melancholy, often thinking how he should complete the mass of works which he had to do; but what did him most harm was his copious indulgence in wine at the strangers' dinner-table. Five or six years after he professed he went with his brother Nicholas and others to Cologne, and on his return was seized with such a hot fit that but for his friends he would have laid violent hands on himself. He was brought back with difficulty to Brussels, and there the prior who had been sent for endeavoured to soothe his passion with music; but for a long time nothing would quiet him, and he laboured long under the belief that he 'was a son of perdition.' At last he improved, and of his own accord gave up attending in the refectory, and took his meals with the lay brothers." Perhaps the writer may have been a little jealous of his brother novice being invited to the strangers' dinner-table, but it is not improbable that we have here the secret of poor Hugo's "melancholy."

A few facts are added to those already known concerning Roger Van der Weyden and Memling, but no such interesting contemporary comment as this of the novice Offhuys has been found.

The much disputed altar-piece of the "Last Judgment" at Dantzic, which has been assigned to Van Eyck, Van der Goes, Albert Van Ouwater, and lastly by Professor Hotho to Memling, is now reckoned by MM. Crowe-Cavalcasse among the latter's authentic works. It was not mentioned, or at all events not assigned to Memling, in the first edition, but we have now an interesting history of it from the *Dantsiger Chronik*, and an outline drawing, the same as that in Kugler and Waagen's Handbook (*Flemish Schools*).

One entirely new name has recently been added to the annals of Flemish art, that of Gheerardt Davidt, to whom there is nearly a whole chapter devoted in the present edition. His paintings were known before, and were considered to be the work of one man, but to our countryman Mr. Weale belongs the honour of having rescued the artist from the lists of the "unknown." It appears that this "Gheerardt Jans fs. [filius] Davidt of Oudewater" came to Bruges in 1483, paid the dues of the guild as a stranger in 1484, became fourth *vinder* of the guild in 1488, first *vinder* in 1495 and 1498, and dean in 1501; that he married Cornelia Cnoop, daughter of a goldsmith, and was, there is every reason to believe, a worthy Flemish master, and follower of the Van Eycks. His principal existing work is a "Baptism of Christ" in the Bruges gallery.

These are about the most important of the new facts contained in this edition of the *Early Flemish Painters*; but the whole work, as before stated, has been rewritten, the matter thoroughly sifted, and the facts verified.

The thanks of all students of art history are due to its authors for the patient labour they have bestowed upon their work.

M. M. HEATON.

THE DUDLEY GALLERY.

In a modern picture exhibition of small and unremarkable works, such as, without disrespect, we may consider that of the Dudley Gallery to be, it is especially true that, as Shelley remarks of all picture exhibitions, "we see three hundred pictures we forget for one we remember."

The impressions produced on the mind by such works are so slight that they are easily effaced, and although while in the Gallery we are able to note that some are more deserving of praise than others, no sooner are we away than they all alike lose themselves in the prevailing fog.

By far the greater number of the paintings in the Dudley Gallery are landscapes. Almost all show careful study of nature, an artistic appreciation of the varied aspects of sea and sky, and a faithful endeavour to reproduce observed effects. By this means pleasant and truthful little pictures are produced, but unless the artist gives us something more than all this—something added to this—we are apt to feel uninterested in his work. It is the artist's mind that we miss in such reproductions—the artist's own thought about the nature he copies; without this we might almost as well have a photograph. Mind, it must be owned, struck us as being altogether left out by most of the landscape artists of the Dudley; nevertheless there were many excellent landscapes whose faithfulness most people no doubt would prefer to what they would call the idealisation of the scene by the artist's own imagination. Of these we may mention H. Moore's "On the Goodwins" (83); "A Herring Fleet in the Sound of Kilbannan," by H. Macculum (32); "St. Martin's Summer," by the same (96); "Morning—Farmyard, Tynemouth," by C. Richardson (339); "Near Rotterdam," by Joseph Knight (448); "At Stobhall, Perthshire," by W. B. Scott (114); "Barges on the Thames," by Madame Bodichon (455);

"Bruges," by T. C. Farrer (323). Several others besides these gave us pleasure at the exhibition, but at the distance of a week from our visit we cannot call up any distinct recollection of them.

Of the few figure subjects Mr. Burne Jones's "Hesperides" and "Love among the Ruins" (179, 482) easily fix themselves in the memory. It is difficult in fact to escape being haunted by those wearied, pallid daughters of Hesperus, who, as they dance round the tree, look more like galvanized corpses than nymphs of Greek fable. There is a rhythmic poetry, however, in this, as in most of Mr. Burne Jones's works, that has a peculiar charm of its own. "Love among the Ruins" is marked by the same hopeless melancholy. Mr. Poynter's sketch in fresco of "The Gardeners" (515) is an excellent example of decorative art in the simple but imposing classic style. It might have decorated a Greek Lesche. Of portraits may be mentioned Mr. Poynter's "Portrait of Mrs. J. P. Heseltine" (88)—a lady dressed in a blue and white china plate, and a charming portrait of a good little girl earning an orange, by J. C. Moore (272).

ART IN PARIS.

SINCE order was restored the French Government have been very active in all matters connected with art, to atone for the destructions of the Commune.

At the Louvre the Salle d'Apollon has been restored, the beautiful Gobelin tapestry portraits repaired. Three new salles have been opened, and the galleries extending the whole length of the building, parallel to the Seine, as far as the Pavillon de Flore are to be filled with paintings. Many statues have been removed from the gardens of the Tuileries and Versailles and placed in the sculpture galleries to keep them protected from the weather. The "Venus" of Milo again stands there in fresh beauty, unhurt by her entombment, and the two plaster casts taken, the one in her present position, supposed to be the original, and the other inclined, as given by Bernard Lange, stand side by side in the Salle des Moulages, so that the two attitudes may be compared. The Egyptian Museum has just made a most valuable acquisition—a group of three figures, Osiris, Isis, and Horus, of about four inches in height, of solid gold: Isis with her cow's horns and disc; Horus, hawk-headed, wearing the "pschent" or Egyptian crown, sits between his mother and Osiris, who stands on the other side holding the crook and whip. On the pedestal are legends of Osorkon II., of the twenty-second dynasty. This little group was purchased by the French Government, at the cost of £1,000, out of the collection of M. Dimitrio, of Alexandria. The place where it was found is unknown, nor has M. Aug. Mariette, director of the excavations for the Pasha, been able to gather any information respecting it. This is what generally occurs as regards objects of gold. The Arabs sell them without making known their derivation, as it is their interest to keep silent on the subject. The salle containing the Musée des Souverains, dispersed in such Gothic taste, has not been re-opened.

In the Louvre, Pavillon Jean Goujon, the last sale of the "mobilier" of the imperial palaces has just taken place. The china and glass with the N. and imperial crown sold at high prices, purchased chiefly by the Americans; but together with these was included a quantity of stags' horns which formed the decoration of the imperial hunting boxes. Each set of antlers bore the date of the hunt at Fontainebleau or Compiègne at which the stag had been killed. By a strange caprice of fortune, on the head of a magnificent seven-year-old stag was inscribed, "Tué à Compiègne, aux étangs de Saint-Pierre. Présent: S.M. le roi de Prusse."

The National Assembly has voted 200,000 francs for the purchase of the rare collection of the coins of Gaul, of M. de Saulcy, which has been the work of twenty years' collecting. It is said the British Museum offered for it 300,000 francs, but that M. de Saulcy patriotically preferred reserving it for France, though at a lower sum. This collection is now in the National Library, and comprises about 7,000 pieces, among which are 1,000 in gold, and forms an invaluable monetary series of the coins of Gaul. It probably will eventually be transferred to the Gallo Museum at St. Germain.

The Gobelins are now under the direction of M. Alfred Darcel, late keeper of the ceramic collection at the Louvre. When the

Communists set fire to the building the greater part of its masterpieces were burned. Out of ninety tapestries of priceless value seventy-five were destroyed, copies from Le Brun, Boucher, Coypel, Vanloo, Audry, Mignard, and others. The part of the building necessary for continuing the manufacture has been rebuilt, and some beautiful works are now in progress for the new opera-house, which is proceeding slowly. They say Carpeaux' objectionable Bacchanal group will be removed into the interior of the building.

The Musée de Cluny was unscathed. Such a disgrace its fine collection of pottery should be so incorrectly and scantily described, probably no more than the sale catalogue description of the pieces when purchased. Why not a catalogue raisonné like that excellent one of the Louvre? But in both museums a descriptive ticket should be affixed to each specimen, as is practised at South Kensington and in a less degree at Sèvres. No steps have been yet taken to transfer the ceramic collection of this last place to the new building. M. Champfleury now has the office of the lamented and learned Riocreux.

Soon will be opened at the Palais de l'Industrie the Musée Européen of M. Jules Simon, Government having ordered copies to be made by eminent artists of the most celebrated works of the great painters of all nations. Of these about a hundred and fifty have been finished.

The designs have been made for the new Hôtel de Ville, which now, in its beautiful desolation, recalls strongly, site always excepted, the ruins of Heidelberg. The municipal authorities are actively working at making the Hôtel de Carnavalet, the residence of Mme. De Sevigné, fit for the reception of the city antiquities and what remains of its library. The floors of the corridors have been taken up and replaced with red tiles, picked out with blue and yellow. The old glazings of the windows have been preserved, but all now is confusion, the panelling of the walls taken down, the cabinet d'étude in which Sevigné penned her letters, the chambre bleue, the summer bedroom with its fine chimney-piece, are all bouleversé. The beautiful façade and statues of Jean Goujon are under restoration. The famed sycamore tree in the garden has been cut down; and the antiquities are not yet transferred to the building, with the exception of a number of skeletons embedded in plaster, found in the excavations made at Mont Ste. Geneviève, when a Roman circus was discovered, but the ground being covered with buildings the purchase of it was impracticable.

NOTES ON ART.

The *Zeitschrift für bildende Kunst* of March 21 opens with a long biographical and critical notice of Anselm Feuerbach by Fr. Pecht. Feuerbach is one of the few living artists in Germany who still continue to draw their inspiration from the antique. In many respects he may be considered as the successor to Carstens and Ingres, but his style differs considerably from theirs. His paintings are cold in feeling as well as in colour, and like most of the masters who aspire to a grand style he too often sacrifices originality to what he considers the claims of high art. Haydon made the same mistake. Anselm Feuerbach was born in 1829, studied first at the Düsseldorf Academy under Schadow, and afterwards in Italy. The "Death of Pietro Aretino," exhibited in 1853, brought him first into notice. This was followed in 1857 by "Dante with Noble Women in Ravenna," and somewhat later by "Petrarch seeing Laura for the first time in Church." To the Munich Exhibition of 1869 he contributed an important painting representing a classic symposium, which was criticised as appearing among the more gaudy works in the exhibition "like an iceberg from the Arctic regions." His more recent works are "Orpheus and Eurydice," "Medea," and a "Judgment of Paris," conceived in a strictly classic spirit. The article is illustrated by an etching by Professor Raab of a Pietà now in the possession of Freiherr von Schack, and a woodcut of the "Iphigenia" of the Stuttgart Gallery, the best known perhaps of Feuerbach's works.

A drawing by Holbein, executed with extreme care and of exquisite finish, was recently sold at the Hôtel Drouot for the enormous sum of 7,050 frs. The auctioneer was about to knock it down to a gentleman who it was understood was one of the keepers of the Louvre collection for 700 frs., when

M. Suermondt entered into competition and finally succeeded in carrying it off from the Louvre by purchasing it at the price above mentioned. Dr. Woltmann, the German biographer of Holbein, imagines that this drawing, which is of a man's head, three-quarter view, bears some resemblance to the portrait of Charles Wingfield in the Windsor collection.

A young Russian engraver, N. Massaloff, has done good service to art by reproducing by means of etching the most celebrated works of the still but little known gallery of the Hermitage, at St. Petersburg. In two magnificent folio albums Herr Massaloff gives us first, forty fine etchings of Les Rembrandt de l'Ermitage Impérial de Saint Petersburg, and secondly, in Les chefs d'œuvre de l'Ermitage Impérial de Saint Petersburg, twenty etchings of the works of other celebrated masters. This latter album is principally devoted to the Dutch genre school, but Titian's "Danaë" and one or two other Italian works have found their way into it. It promises to be only the first of a series, so that we may hope in time to have satisfactory reproductions of all the great works stored up in the northern capital. Hitherto they have been known only by very poor engravings and lithographs. Herr Massaloff has a complete mastery over the technic of his art; his etchings are spirited and powerful and well preserve the character of the original, but they have not the delicacy that distinguishes the works of the German engraver W. Unger, who has in a similar manner reproduced the chefs d'œuvre of many of the less known galleries of Germany.

The annual distribution of prizes to the art schools throughout the kingdom took place on the 26th of March at Burlington House, their Royal Highnesses the Prince and Princess of Wales being present. Out of the 120 art schools that entered into competition the Female School of Art in Queen's-square, Bloomsbury, carried off the most prizes. In that school one out of every 22 students gained an award, whereas in the Edinburgh school one out of 26, in the Manchester school one out of 36, and in the Birmingham school only one out of 62 received a prize. The Committee of Council on Education has therefore placed the name of Miss Gann, the superintendent of the school in Queen-square, first on the list of premiums awarded to the heads of the art schools.

The art article in a recent number of *Im neuen Reich* is entirely taken up with a stricture on the management and arrangements of the Berlin Museum. The writer, R. Dohme, considers that an institution that appears in the supplement to the budget for 200,000 thalers ought to have a wider influence and to be more effective in its working.

A public subscription has been opened in Italy for the purpose of raising a monument to Titian on the occasion of the fourth centenary of his birth. This will not be, however, until 1877. Italy has certainly not been in too great a hurry to pay this tribute to the memory of her "supreme colourist."

The National Library of Florence, says the *Nazione*, in accordance with a clause in a treaty concluded with Austria-Hungary, has been obliged to restore to the heirs of Duke Leopold II. of Tuscany a richly illuminated manuscript on vellum of which it has long been possessed. The manuscript is dated 1588, and contains miniatures of the German school and very beautiful initial letters; it has, moreover, a family interest, in that it is said to contain the genealogy of the house of Hapsburg-Lorraine, a genealogy including nearly a hundred saints. All the other manuscripts acquired from the Ducal collection are allowed to remain in the National Library on condition that they shall not be removed from Florence.

The *Mémorial Diplomatique* states that the Church of Abongosch in Palestine on the route from Jaffa to Jerusalem has been given by the Porte to the French Government. This building is of interest as dating from the time of the Crusades. It is greatly in ruins, but it is hoped that it may now be preserved if not restored.

Dr. Willshire, who was for many years a distinguished London physician, but who suddenly in the midst of his career

renounced medicine for the sake of art, is, we hear, engaged upon a small work intended to be introductory to the study and collection of old prints. Dr. Willshire has been long known as a devoted print collector.

One of the most gifted of the younger school of Scandinavian painters, August Schneider, has committed suicide at Antwerp. His death will be a blow to Northern art. He was just engaged in illustrating Asbjørnsen's famous Folk-stories.

A new court will shortly be opened at the South Kensington Museum. It will be entirely devoted to reproductions of plastic works, and will be especially valuable to art students, for we hear that a series of casts of works, dating from the earliest ages of sculpture to the time of its fullest development, will be arranged in historical order along the galleries for their especial use.

A loan exhibition of decorative art needlework made before 1809 will likewise prove an additional attraction during the coming summer to the South Kensington Museum.

In the *Zeitschrift für bildende Kunst* G. Gutenberg continues his notice of the Bethnal Green Museum, criticising especially the paintings of the Spanish school.

We have heard from Rome that Storey, the American sculptor, will not send his great statue of "Jerusalem Fallen" to London, being dissatisfied with the manner in which sculpture is exhibited at the Royal Academy. He might, however, surely afford Londoners a view of his work before sending it off to America, even if he does not choose to honour the Royal Academy with it.

It is said in Paris that American artists will be in great force in the forthcoming Salon. Bridgeman, who made a great success last year, now sends a Spanish subject. Great discontent prevails among artists this year, however, because the Government has restricted the space usually allotted to them in the Palais de l'Industrie in order to make room for the projected gallery of copies from all the great collections of Europe.

Gustave Doré sends to the forthcoming Salon a painting of the Crucifixion, "Jour des Ténèbres," a subject well suited to his weird and poetic treatment. This artist we hear is studying Shakespeare with a view to illustration. He intends bringing out one play at a time.

The *Révue des deux Mondes* of the 15th of March contains an important article, entitled *L'Archéologie et l'Art*, by Henri Delaborde. M. Beulé's recent work, *Fouilles et Découvertes*, and the exhibition mentioned in a previous number of the works of the late Léon Vandoeyer at the École des Beaux-Arts, form the *raison d'être* of the article, but it is more than a mere critique.

On the 24th of March, and the four following days, Messrs. Christie, Manson, and Woods sold the first portion of the impressions from plates after Turner's works that had remained in the artist's possession; amongst others some etchings from unpublished plates of the *Liber Studiorum*. Details of this sale and the prices realized have been given in so many journals that we do not think it necessary to repeat them. The second portion of the Turner collection will be sold on 23rd inst. and the two following days.

The result of the controversy which has been carried on in the *Times* concerning the "Yarmouth Water Frolic," belonging to Prof. Selwyn, and exhibited during the winter at the Royal Academy, tends, as far as we can judge, to prove that the picture is by the younger and not by the elder Crome. Critics, however, will no doubt still continue to find the question sufficiently unsettled for them to enjoy the pleasure of disagreeing upon it.

The new descriptive and historical catalogue of the Madrid Museum, prepared by Don Pedro de Madrazo, gives a very full and, on the whole, correct account of the works of the great Spanish gallery. It contains many new and interesting

particulars as to the origin of the pictures, and their authorship is assigned with considerable judgment. Only the first part is as yet published, comprising the Spanish and Italian schools, but we may hope that the German, Flemish, and Dutch schools will soon follow. The pictures are numbered afresh in the new catalogue, but it is characteristic of Spanish dilatoriness that the change carried out in the catalogue has not yet been effected in the gallery itself, so that a valuable work is made comparatively useless. The usefulness of the work is also retarded by its being in Spanish. A French translation is much needed.

For some time it was doubtful whether the German schools of Düsseldorf, Berlin, Dresden, and Munich would be represented at the forthcoming exhibition at Vienna, for it was discovered at the beginning of the year that a treaty had been made between Baron Schwarz, the general director of the exhibition, and the representatives of French art, securing to France and Austria the most important positions in the new building, a very inadequate space and inferior positions being left for Germany, Great Britain, and Italy. The Düsseldorf artists protested energetically. Professor Hoff was very active. Meetings were also held at Berlin, at which all the schools were represented, and these meetings came at last to the resolution that Germany would send no picture to the exhibition unless Baron Schwarz altered his plans. The Austrian artists met subsequently at Vienna, and agreed with their German colleagues. The result has been that Baron Schwarz has yielded, and though it is not yet known what arrangements are made, German artists are satisfied and intend to exhibit. The reason for favouring France beyond other nations by conceding to her half of the entire space in the exhibition is stated to have been that the French Government had promised to forward pictures from all its galleries, including that of the Luxembourg. It was certainly desirable that the collection of masterpieces from Paris should be as large as possible; but it was not too much to ask that other nations should obtain space according to their wants, and this had not been done at all.

Professor Andreas Müller is busy restoring the large and interesting panel by Rubens representing the "Assumption of the Virgin" which adorns the gallery of Düsseldorf. He is doing his work with great care and precision, and not before it was wanted. It has never been stated from whence this picture came; but it is now discovered to have been purchased at the beginning of the eighteenth century by Johann Wilhelm, Elector of the Palatinate, and carried from Brussels to Düsseldorf on the shoulders of a detachment of grenadiers. The picture, one of the finest and largest of those that Rubens executed for the Belgian capital, stood originally over the high altar of the church of Notre Dame de la Chapelle at Brussels, and was sold after the French bombardment of 1693 for the sake of raising funds for the church's repair. It was presented to Notre Dame de la Chapelle by the Archduke Albert in 1614, and had previously been given as a present by Rubens to the Archduke's wife, Isabella Clara Eugenie, regent of the Netherlands.

The collection of antiquities which Sig. Castellani offers for sale to the British Museum has just received an addition of very great importance in the shape of (1) a bronze head of Aphrodite in extremely grand Greek style, and (2) an Etruscan sarcophagus sculptured with low flat reliefs of the greatest interest both for their fine archaic style and for the variety of the figures and actions.

New Publications.

- BAETHEKE, H. Der Lübecker Todtentanz. Ein Versuch der Herstellung des alten niederdeutschen Textes. Berlin: Calvary.
 BARNI, JULES. Les Moralistes français au XVIII^e siècle. Baillière.
 HANDELMANN, H. Die äthnischen Ausgrabungen auf Sylt, 1870-1872. Mit 2 Steindrucktafeln. Kiel: Schwer'sche B.
 HERACLIIUS: von den Farben u. Künsten der Römer. Orig. Text u. Uebersetzung v. A. Ilg. [Quellenschriften für Kunstgeschichte, u.s.w.] Wien: Braumüller.

- HORAWITZ, A. Beatus Rhenanus literarische Thätigkeit in den Jahren 1530-1547. (Academy Reprint.) Wien: Gerold's Sohn.
- KING, C. W. Early Christian Numismatics and other Antiquarian Tracts. Bell and Daldy.
- ORTOLAN, ELZÉAR. Les pénalités de l'Enfer de Dante, suivies d'une étude sur Brunetto Latini.
- STEPHEN, J. F. Liberty, Equality, and Fraternity. Smith, Elder, and Co.
- TRADITIONS et LEGENDES de la suisse romande, par Al. Dagnet, Roger de Bons, Aug. Bachelin, Bridel, &c. Sandoz et Fischbacher.
- ZINGERLE, J. Das deutsche Kinderspiel im Mittelalter. 2^{te} vermehrte Aufl. Innsbrück: Wagner.

Physical Science.

The Physical Effects of Forest upon Atmosphere and Soil. [*Die physikalischen Einwirkungen des Waldes auf Luft und Boden, und seine klimatologische und hygienische Bedeutung, begründet durch die Beobachtungen der Försil. Meteorologischen Stationen in Bayern.*] Dr. Ernst Ebermayer. Aschaffenburg: Krebs.

"THE welfare and the progress of a country depend to a certain extent on the amount of forest which it contains." Such a statement appears strange enough to us here at home, but its truth has at last been recognized at the India Office, by the foundation of a forest department, the cadets of which have been sent for training to the continental schools of forestry. The present volume is the outcome of the first five years' results obtained at the stations in Bavaria established under the superintendence of Prof. Ebermayer, of the Forest School of Aschaffenburg.

Many of the statements in the book depend on the observations of only three years, or even of a single year, but our author states his conviction that the main features of the subject can be elicited with sufficient accuracy for each station in a period of observation as short as that mentioned, and that the instruments can then with advantage be removed to a fresh station.

It must be remembered that the difficulties of the observations are very exceptional, as the mounting a ladder to read a thermometer in the top of a tree is not an agreeable duty to perform in all weathers, and so too great a tax must not be laid upon the officials to whom the instruments are entrusted.

The subjects investigated in the open country are, speaking generally, temperature in shade and sun, earth temperature, hygrometry, rainfall and evaporation. To these are added, in the forest, observations made in the head of the tree and on the temperature of the heart of the tree itself at various heights.

The first stations were established in 1867, and the total number in Bavaria is seven, distributed over the country. To these is added one in Bohemia on the property of a nobleman. The outfit of each station cost about £40, and the yearly cost of maintenance is one-half that sum. Some of the apparatus used deserves special notice, especially the vaporimeters for open water surfaces and for soil, and the arrangements for determining the amount of infiltrated water.

The subject is, comparatively speaking, so new and the variety of observations so great that the author for the most part contents himself with simply enumerating his results without attempting to deal with the subject as a whole. We shall therefore confine our remarks to an account of some of the more important subjects touched upon in the volume.

Earth Temperature comes first, as being the most important element for vegetable life. It is found at the various depths, 0—4 feet, to be lower, to the extent of twenty-one per cent., on the mean of the year, in the forest than in the

open, and this is pre-eminently the case in spring and summer, while in winter the difference is scarcely traceable. This shows us that the effect of clearings is mainly felt in summer, and that it is greater the warmer is the climate. Diurnal range is felt only to the depth of three feet, and it is materially diminished by the presence of forest. The annual range of temperature is less in the forest than outside it, but the periods of the two phenomena do not agree very closely.

The effect of wood on Air Temperature is similar to that just described, but the extent of the influence is only about half that exerted on earth temperature: the differences between the temperature above and underground thereby produced are of great importance as affecting the aëration of the soil, and thereby the nutrition of the roots. The observations as regards height show furthermore that the temperature rises with the height at least up to the level of thirty or forty feet. When we remember that the diurnal range is reduced by the presence of wood we see how an alternating vertical circulation, like that assigned as a cause for land and sea breezes, is set on foot, the existence of which, as our author amusingly states, may be proved by watching the smoke of a cigar.

The tendency of forests is found to be to moderate the extremes of temperature, and so to render the climate less severe. This is a direct contradiction to the popular idea that the cutting away of our forests has made our climate less extreme than it used to be.

The observations on Tree Temperature are very valuable, as by them we are able to determine far more simply than by any other means the total amount of heat required by each tree for its development. These experiments also throw great light on the causes which regulate the flow of the sap.

Becquerel's idea that trees warm the air is distinctly controverted by the results under discussion, which show that the temperature of the trees themselves is generally below that of the air.

In the winter the trees are colder than the soil, and in summer warmer: hence we see that the main seat of activity is in the roots in winter and in the branches in summer.

As concerns Vapour Prof. Ebermayer finds that the existence of timber produces no difference in the absolute quantity present in the air, but that owing to the depression of temperature the Fraction of Saturation is raised by the forest. Evaporation from a free water surface is about sixty-four per cent. less in the forest than in the open, and moreover it is far more ruled by the motion of the air than by the temperature. Hence we see the importance to young plantations which are likely to suffer from drought of leaving belts of trees to shelter them. Anything which breaks the force of the wind retains moisture in the soil.

The evaporation from the soil is, however, a very different thing from that from a free water surface, and in considering it we arrive at the valuable result that the brushwood, leaves, &c., which cover the ground exert quite as great an influence in retarding it as the forest itself.

It is found that for every hundred cubic inches of water evaporated from the soil, in the open, the ground in a forest, cleared of brushwood, &c., gives off only thirty-eight, and the uncleared ground, in its natural condition, gives off only fifteen cubic inches. Hence we see how immediately the water supply depends on the wood, and the fact confirms the old observation that in new and thriving settlements the springs dry up in proportion as the land is cleared.

It is a self-evident proposition that plants require rain,

but Hellriegel has shown how much they require : according to him every pound of barley requires the supply of seven hundred lbs. of water during the period it is in the ground. Trees require a different quantity from corn, and in addition they have a very great effect in draining the land, for it is found that land from off which the timber has been entirely felled often becomes swampy, and only dries again when the new plantations spring up. This fact shows us that trees exert a constant demand on the moisture of the soil, so that over-drainage of the ground must seriously affect their growth.

It is then a most important matter to determine the effect of forest on moisture. Prof. Ebermayer's experiments lead him to the view that the idea of the effect usually attributed to wood in increasing rainfall is not fully justified, and that much which has been held to be due to the timber in a country is really much more due to the contour of the country itself. The influence of forests on rain is however much greater among mountains than in the plains; it is also greater in hot climates than in cold, and in summer than in winter.

The actual amount of rain which is collected on the ground in a forest is about three quarters of that which falls on the cleared land outside. The quantity in defect does not all remain in the tree tops, as much runs down the stem; but it is found that the proportion retained by the foliage differs with the different character of the wood; thus it is greater with conifers (Nadelholz) than with leaf trees (Laubholz), and of all trees Scotch fir retains the most.

The usual proportion between evaporation from a free water surface and rainfall on the same surface during the year is that the former rather exceeds the latter. The evaporation from the ground is very different from that from a water surface, and so, as regards the soil of a wood, the proportion above mentioned is reversed, for the diminution of evaporation is less than that of rainfall. If however the wood be cleared of brushwood, leaves, &c., the rate of evaporation from the soil is seriously increased, and in fact in such a case the amount of water stored up in the ground against periods of drought falls below that in open land, owing to the fact that so much of the rain is intercepted before it reaches the ground.

The work concludes with some remarks on ozone, and on the hygienic effects of forests, and with some practical applications of the results obtained to the explanation of the causes of certain diseases which are very destructive to young fir plantations. Copious tables are appended, with an atlas of graphical representations of the results.

Our hearty thanks are due to Prof. Ebermayer for the work, which contains, as will be seen, a mass of carefully collected and important data of the highest value to the scientific meteorologist and botanist, as well as to the practical forester and the landscape gardener. R. H. SCOTT.

Notes on Scientific Work.

Chemistry.

Thermo-chemical Researches.—The first part of a paper by J. Thomsen, of Copenhagen, on the affinity of hydrogen for chlorine, bromine, iodine, oxygen, sulphur, nitrogen, and carbon appears in *Poggendorff's Annalen*, 1873, No. 2. Attention is drawn to the value of these fundamental numbers for thermo-chemical inquiries and the vast importance of their experimental determination being conducted and checked with the greatest accuracy. With this end in view the author has passed over the ground traversed by former observers, and has met with some important facts. In the case of the number indicating the affinity of chlorine for hydrogen he finds that it has hitherto been incorrectly given, so that calculations which have been based on it are rendered valueless. Thomsen's number is 1782 lower than that of Favre and Silbermann, which has hitherto been exclusively in use. He attributes this grave error to their having employed chlorine containing

a certain amount of oxygen. The gas which they used was preserved over a solution of salt. That chlorine gradually decomposes water even in the dark is hardly to be doubted, and it would then become contaminated with oxygen or more probably hypochlorous acid. Thomsen employed concentrated sulphuric acid. The affinity of hydrogen for chlorine in gaseous hydrochloric acid is 22001^c per molecule of the compound. The affinities of bromine and iodine respectively were indirectly determined by the decomposition of their compounds by means of chlorine. In the case of oxygen and of sulphur the first number was estimated by burning hydrogen in oxygen, the second by decomposing sulphuretted hydrogen with iodine; for nitrogen the reaction of chlorine with ammonia was used. To find the affinity of carbon for hydrogen the heats of combustion of ethylene and acetylene were each determined. From the heat of combustion of the hydrocarbon the heat of formation of the compound is obtained by subtracting it from the sum of the heats of combustion of the constituents. A detailed description with an elaborate drawing of the apparatus accompanies the paper, the last part of which will contain some general conclusions that these researches have enabled the author to arrive at.

The Carbonic Acid in the Air of Soil.—Von Pettenkofer has carried out an elaborate series of experiments for the purpose of determining the amount of carbonic acid in the air entangled in soil at different depths and at various seasons of the year. He examined, month by month during a year, the air from soil lying 4, 3, 2½, 1½, and ½ metre below the surface, and has compiled a table showing the number of volumes of carbonic found in 1000 volumes of air on each occasion. (See extract from *Sitzber. bayr. Akad. in Chem. Cent.-Blatt*, 1873, No. 4, 53.) During the greater part of the year the air in the upper contains less carbonic acid than that of the lower layers. This proportion is inverted for a short time in summer, in June and July the upper layer containing more carbonic acid (7·7 and 8·8) than the other (6·36 and 8·07). This sudden increase in the upper layer immediately precedes a proportionately much greater increase in the lower layer, for in August and September the lower again surpasses the upper layer in amount, and that to an astonishing degree. In the upper layer the carbonic acid increases from 8·8 in July to 10·38 in August and 9·93 in September, while in the lower layer it rises from 8·07 in July to 10·13 in August and 14·01 in September. In October the numbers for both layers decrease to a considerable extent: in the upper from 9·93 to 4·18, in the lower from 14·01 to 6·46, or more than 50 per cent. of the whole in each case. The paper contains many interesting speculations respecting the source of this carbonic acid.

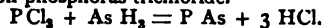
Chloral.—By heating hydrate of chloral with glycerine to 230° H. Byasson found (*Compt. rendus*, 75, 1628) that a number of substances passed off and condensed in the receiver in two layers: the lower consisting of chloroform, the upper containing formic acid, hydrochloric acid, formate of allyl, and hydrate of chloral dissolved in water. The chloroform amounted to 31 per cent. of the hydrate employed.—In the *Ber. Deut. Chem. Gesell. Berlin*, 24th March, 225, J. Grabowski, writing from Strassburg, remarks that concentrated sulphuric acid is usually stated to exert no action on chloral in the cold beyond converting it after a time into an insoluble modification. He has found however that with fuming acid it unites at once to form a solid white mass made up of large crystals of the anhydride of the neutral sulphate of chloral (C₃H₄Cl₃O₁₁S₂). This compound is not changed by cold, but is decomposed by warm water. It is likewise broken up when dissolved in alcohol, but separates unchanged from its solution in ether in the form of needles. When the vapour of Nordhausen acid is conducted into chloral a more stable compound is produced, which can be crystallized from its alcoholic solution.

Dewalquite.—This name has been given by F. Pisani (*Compt. rendus*, 75, 1542) to a silicate of aluminium and manganese, containing vanadic acid, which occurs in small crystalline tabular masses on quartz at Salm-Château, in Belgium. The oxygen ratios of SiO₂ : R₂O₃ : RO are 5 : 5 : 3, and the manganese protoxide amounts to 26·4 per cent. The composition approaches nearly that of masonite if the iron be assumed to be replaced by manganese. Masonite however contains 5 per cent. of water, and has very different optical characters from the above mineral, which Pisani has named after the Belgian geologist. Lasaulx analysed it at about the same time, and regards it as a manganese disthene in which one equivalent of aluminium has been replaced by manganese. Pisani however finds that the whole of the latter metal is present as protoxide, and that the crystallographic and optical characters of the Belgian specimen are altogether different from those of disthene.

Santonol.—L. de St. Martin states (*Compt. rend.*, 75, 1190) that by the reduction of santonin a diatomic phenol, C₁₅H₁₈O₂, a monatomic phenol, C₁₅H₁₈O, and a hydrocarbon, C₁₅H₁₈, may be obtained. The latter body is homologous with naphthalene and isomeric, if not identical, with amyl-naphthalene. The monatomic phenol, to which he has given the name of santonol, is prepared by heating santonin with zinc powder in a current of hydrogen. The new body appears to exist in two forms: as a crystalline substance resembling stearin, and as

a liquid which undergoes rapid change by exposure to the air. Both are insoluble in water, but are readily taken up by alcohol or ether.

Phosphorus arsenide.—This compound has been prepared by J. V. Janowsky (*Ber. Deut. Chem. Gesell. Berlin*, 24th March, 1873) by the action in the cold of perfectly dry arsenetted hydrogen, prepared from sodium arsenide, on phosphorus trichloride.



Phosphorus arsenide, when freshly precipitated, forms a bright reddish brown powder which becomes dark and lustreless when dry. It is easily acted on by water, but is not attacked by cold hydrochloric acid. Potash, ammonia, or baryta decomposes it, forming phosphuretted hydrogen, arsenetted hydrogen, phosphorous acid, arsenious acid and free arsenic. Water, as has been stated, acts upon it and forms a substance having the composition $\text{As}_2 \text{P}_2 \text{O}_5$. Acids, with the exception of nitric acid, have no appreciable action on this body, but alkalis decompose it at ordinary temperatures. It decomposes slowly at 100° , and rapidly at 250° .

Anthropology.

A report on a series of excavations among the *tumuli* in the island of Sylt (*Ausgrabungen auf Sylt, von H. Handemann, Kiel*, 1873), conducted at the instance of the Schleswig-Holstein authorities and extending over the years 1870, 1871, and 1872, gives a detailed account of the operations, with descriptions of the objects discovered and careful engravings of the most important of them. It appears that thirty mounds were opened, and found with one exception to have been ancient places of burial. Some of them, it was seen, had been previously searched, probably for the treasure which local imagination pictured them to contain. A mound once opened in haste and in the night would have to yield its last relic as some sort of compensation. Separating the mounds into two classes according as their tenants had been burned or not before burial, and comparing their contents, no evidence was found of the one mode of sepulture having been practised, as is supposed, always exclusively of the other. Both contained the same class of relics—bronze swords, sometimes with wooden sheaths and hilts richly ornamented with those spiral and linear patterns with which we have become familiar in the best works of the so-called bronze age; bronze axes, fibulae and rings, all of which clearly mark the occupants as having been persons of distinction in their time. Occasionally an article of gold or flint was found, but the latter material never under such circumstances, even when found alone in a tomb, as would entitle its original owner to be described as having lived in the stone age. When combustion had not been resorted to, it was found that the bodies had been wrapped in the bark of trees and bandaged by shreds of the same. Some small fragments of woollen stuff were found in cases where the bodies had been burned and the ashes deposited in the tomb. Two swords which were found in one cist have this peculiarity, that their sheaths, which were of wood, were lined with leather, the hair of which had not been removed, but was turned inwards away from the blade. Each sword had been wrapped in a piece of brown woollen cloth, very little of which remained. The opening of one of the mounds (No. 24) raised a question for which it is difficult to find a satisfactory answer. For contrary to all precedent the relics, consisting of a flint saw, a bronze knife and sword in fragmentary condition, were found not inside the cist, but outside, and stuck in among the stones of which it was made, as if having forgotten them until the heavy lid had closed over the deceased, the mourners had been unable to move it again, and had sought to soothe their consciences by placing them as near the dead as they could. Not less inviting to conjecture was the result of the excavation of another mound (No. 26) within which was found a cist containing nothing but the remains of a human skull, and these under such circumstances as to leave no doubt that the head alone of some decapitated person had been interred. It may have been, as is thought, the head of a leader who had fallen on a distant battle-field, where his body would be buried, while his head, according to ancient usage, would be carried off and entombed in his native place. The absence of relics, however, does not speak for an affectionate action of this kind. It is further remarkable that the place of sepulture had been originally a cistern for collecting rain, or perhaps a small spring, the water of which kept the earth inside the mound wet till the day it was opened. The mounds of Sylt had attracted the attention of Northern antiquaries as early as 1756, in which year excavations of considerable extent were made, and the results published. Again in 1849 we find a number more opened and their contents systematically described. From that time little or nothing appears to have been done till 1870, when the excavations of which we have now the report commenced.

Zoology.

New Researches on the Natural History of Bacteria.—Dr. Ferdinand Cohn, in the second part of his *Botanical Contributions*, recently published at Breslau, gives an account of researches which he has conducted for many years on various questions relating to Bacteria. A highly important memoir was published twenty years ago by this algologist, in which he established the occurrence of various phases in

the life-history of Bacteria, especially the Bacterium-jelly or Zoogloea-form. In his new work Cohn divides the Bacteria, which he now regards as colourless algæ allied to the oscillarie, into four groups, reserving however with regard to these groups and their included genera the question of their being phases of one or more real species. These groups are spherical Bacteria (SPHÆROBACTERIA), peg-like Bacteria (MICROBACTERIA), filamentous Bacteria (DESMOBACTERIA), and spiral Bacteria (SPIROBACTERIA). The minute spherical organisms, little more than mere granules, which appear to be connected with certain diseases (vaccinia, diphtheria, pyæmia, pébrine), and which also cause coloured putrefaction, and the alkaline fermentation of urine, appear in the first group under the genus *Micrococcus*. The common *Bacterium termo* and the larger but abundant *B. lineola* belong to the second group, as well as some colour-producing ferments of which that of blue-green pus is especially interesting. The butyric ferment (*Bacillus subtilis*) and the organism connected with the disease known as "malignant pustule" and "the blood" (*Bacteridium anthracis*) belong to the third group, which likewise includes the undulate forms comprised in the genus *Vibrio*. The fourth group contains the remarkable forms of *Spirillum* and *Spirochæte*, one of which, *Spirillum volutans*, is provided at each end with a protoplasmic flagellum. The typical forms are all clearly figured in a plate. Cohn considers that the protoplasm of Bacteria is not naked as sometimes supposed, but that it has a dense cell-wall. Bacteria multiply exclusively by transverse fission and never branch; by arrest of the actual separation of new-formed cells or cytods (for there is no nucleus) they may however form chains, or grow into long filaments in which the division into separate elements cannot be recognised. (*Leptothrix* forms). They exhibit very active movements in the presence of oxygen, but become quiescent in its absence. After an exhaustion of the nutriment or the supply of oxygen accessible to them in an infusion they form a fine precipitate, and remain in this state, preserved from decomposition by their dense cell-walls; this is also the case if they are boiled or treated with reagents. According to their external effects Bacteria may be classed as Chromogenous, Pathogenous, and Zymogenous or Saprogenous. The colour-producing Bacteria are of very great interest. Their characters have been traced out to some extent by Schröter under Cohn's direction. One form especially, *Micrococcus cyaneus*, Cohn found could be transferred from the boiled potato on which it made its appearance and cultivated in a one per cent. solution of tartrate of ammonium with a proportion of yeast-ash salts. Under these circumstances the production of intensely blue soluble pigment continued for some months. Sanderson had already used Pasteur's solution for the cultivation of Bacteria, but Cohn found it better to omit the sugar from the solution. The Bacteria however absolutely failed to grow if the yeast-ash salts were omitted.

As Bacteria are thus found to be capable of taking up their nitrogen from ammonia Cohn considers it probable that they always receive it in this form, or perhaps sometimes from nitrates, and that the chief work of the putrefactive Bacteria consists in breaking down complex organic molecules containing nitrogen to the condition of ammonia. Their carbon, it appears, must be in a higher condition of combination than is met with in carbonic acid, and in this respect only does their nutrition differ from that of green plants. Their vital processes, like those of all protoplasm, are necessarily accompanied by the fixing of oxygen and the evolution of carbonic acid. The specific products of their life-activity, such as pigments, foul gaseous substances, &c., are independent of the chemical changes in their pabulum and are due to internal chemical work, which goes on just the same whether they are nourished by organic infusions or by ammonium tartrate.

As to the question of spontaneous generation Dr. Cohn is of opinion that Dr. Bastian and others who have become its champions are able to make out an apparently plausible case, not only because they accept illogical conclusions and faulty experimentation, but because, as our knowledge stands at present, there are still certain conditions relating to the life of Bacteria which have not been definitely determined. Cohn has made a considerable number of experiments on the effect of heat in destroying the life of Bacteria, and finds that in such a fluid as Pasteur's a careful heating for one hour to 62°C . is sufficient. In other fluids higher temperatures are required and irregular results may be obtained. A boiling temperature is not certain to destroy life if small lumps are present in the infusion submitted to experiment. *Bacillus* appears to survive a higher temperature than *Bacterium*, but prolonged boiling is destructive of both, and in infusions which had thus been treated none of any kind ever made their appearance. Practically, a temperature of 80°C . destroys the life of Bacteria and prevents their appearance in any infusion or mass which has been raised throughout to that temperature. Temperatures below 0°C . render Bacteria torpid; they recover their activities however on the restoration of warmth.

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- FAUDEL, A. Faune gallo-rhénane. Coléoptères. Tome 3. 3^{me} livre. Caen : Le Blanc-Hardel.
- FERRUA, V. Sulla formazione del terreno vegetale. Vigevano : Spargella.
- GAUDRY, A. Animaux fossiles du mont Lèberon (Vaucluse). 1^{re} livre. Paris : Savy.
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History.

The Sixth Great Oriental Monarchy. By George Rawlinson, M.A. Longmans, Green, & Co. 1873.

THE Sixth Oriental Monarchy, which the Oxford Professor of Ancient History undertakes to describe in this volume, is the Parthian. The book begins with two chapters on the geography and physical nature of the country, and the origin and ethnic character of the race; then, after a review of the condition of Western Asia under the Seleucid princes, an elaborate history is given of the Parthian Monarchy, from its rise as a kingdom under Arsakes and its consolidation as an empire under Mithridates I. down to its final extinction by the successful Persian insurgent Artaxerxes. The work concludes with a sketch of the architecture, religion, and manners of the people, and of their position generally in relation to culture and art.

Professor Rawlinson would regard the history of the Parthian Empire rather as a supplement to that of Rome and the West than as a mere continuation of the ancient sovereignties of the East. The main idea which underlies the whole of his book is that Parthia was the counterpoise

and rival of Rome. Rome was not the universal, unchecked power that the ordinary theory would assume it to be; but "from first to last, from the time of Pompey's eastern conquests to the fall of the empire, there was always in the world a second power, civilized or semi-civilized, which in a true sense balanced Rome, acted as a counterpoise and a check, had to be consulted or considered, held a place in all men's thoughts, and, finally, furnished a not intolerable refuge to such as had provoked Rome's master beyond endurance." This is an important truth, which the future historian of Rome will do well to regard; though we are not sure that a Roman political offender would not have preferred death to exile among "barbarians" whose language he could not understand, even if he were able to traverse successfully the well-guarded eastern provinces of the empire, or the deserts and mountain fastnesses that led to his place of refuge. That the policy of Rome, however, was profoundly influenced by the existence of its formidable neighbour, and its very continuance in great measure secured by the constant exertion and training forced upon it, is a fact which cannot be doubted; and Professor Rawlinson deserves thanks for setting it in a clear light.

In discussing the ethnic affinities of the Parthians, the author decides in favour of their "Turanian" origin, and this seems borne out by the words for "king" and "generalissimo" (*vitaxa* or *βιταξ* and *surena*) which have been preserved for us, as well as by the proper names. I cannot, however, agree with the view that "the Assyrian inscriptions are wholly silent concerning them." It is true that we find no such word as *Partu*, which represents the Persian *Parthawa* in the Babylonian text of the Akhæmenian legends, but the Elamite text has *Partsuas*, and this I believe, with Oppert and Lenormant, answers to the Assyrian *Par'suas* (W. A. I., i., 41, 31) or *Parsua*, as Tiglath-Pileser writes it. *Parsua* appears in the same list as *Zigriti* or *Zigartu*, the *Σαγαρία* of the Greeks, *Arakuttu* or *Arakhosia*, *Urivan* compared with the *Urvâ* of the *Vêdidâd* by Lenormant and Finzi, *Ariarvi* or *Ariana*, and *Nissa*,* the Greek *Νισαία*, the mention of which in the "Zendavesta" under the form *Ni'saya* is thought by Professor Rawlinson (p. 22) to imply that the Parthians were not yet settled in the country. I suppose this is based upon Haug's opinion that *Nisæa* has an Aryan derivation in *ni* and *'si*, "to settle."

A notice of this instructive and carefully-written work cannot be concluded without special attention being drawn to the chapter on Parthian architecture. The subject is unfortunately a meagre one, and Hatra, from which the details have principally to be taken, is rather Arabian than Parthian, while the statements of the romancer Philostratus, quoted on p. 417, cannot be trusted; but the chief point to be brought out into relief is the absolute, nomad-like inability of the Parthian to cultivate art, and this Professor Rawlinson has been successful in making clear to the mind of every reader. The court was migratory, like the court of a Genghiz-Khan; and art slept throughout Western Asia from the revolt of Arsakes until, 300 years later, Aryan influence revived again under the Sassanian dynasty and the supremacy of Persia.

A. H. SAYCE.

Willems on Roman Public Law. [*Le Droit Public Romain, ou les Antiquités romaines envisagées au point de vue des institutions politiques.* Par P. Willems, Professeur à l'Université de Louvain. 2^{me} édition.] Louvain. 1872.

THIS book belongs to a class of which there are not too many examples in French literature, but which is almost

* *Buzus* also is found in this list immediately before *Ariarvi*. I would identify it with the city of *Bitaxa*, "the king's" town, since the form of *Vitaxa* given in Hesychius is *βιταξ*.

unknown elsewhere—that of thoroughly good philological text-books. On the one hand it is fully on a level with the best investigations, not slavishly borrowing, but testing and assimilating their results: on the other hand it is rigorously concise and systematic, the author economizing his space and the attention of his readers with perfect judgment and self-control. The Louvain students of law, for whom it was primarily intended, are happy in having a professor who is 'so well acquainted with what Mommsen calls the "Getümmel" on the building ground of antiquarian learning, and so able to construct for himself a clear and solid edifice of truth.

The method of the book is to give as text a concise and well digested *précis*, according to the view preferred by the author, while the notes—which fill on an average about half of each page—contain full references to the ancient authorities, notices of the chief books, and monographs on each part of the subject, and (where the importance of a controverted point requires it) a summary of the arguments. It would be impossible from the nature of the case to give a sufficient idea of such a work by any *résumé*. Readers will find good specimens of the mode of treatment in the pages dealing with "the Comitatus Tributa and Concilia plebis" (pp. 162-164), and the "patrician senate" (pp. 199-201), which put very clearly the substance of much of Mommsen's later researches. We may also single out the section on "the communal organization of the colonies and *municipia* at the end of the Republic and during the first two centuries of the Empire" (pp. 361-381), a subject on which recently discovered documents have thrown much interesting light.

D. B. MONRO.

Chapters in the History of Yorkshire. By James J. Cartwright, M.A. Wakefield: B. W. Allen.

THE history of that ill-planned and unfortunate rebellion known as the "Rising in the North" has not had the attention devoted to it which the subject deserves. It was the last act in the long drama of feudal turbulence—the last time that the heads of the great northern houses rose in arms against their sovereign. Why it ended unfortunately we hardly know. The incapacity of the leaders must have been the main, if not the sole cause, for it is proved beyond shadow of doubt that almost all the northern and western shires sympathized with the movement, and would have joined their fortunes with the insurgents had the Percy and the Neville of those days shown the genius, or the military ardour even, of their forefathers.

The materials for such a history of this sad event as we should like to see are widely scattered, but many of the most important are probably still locked up in manuscript in inaccessible places; and those that have been edited by Sir Cuthbert Sharpe and others have come before the world in such a manner as to furnish some excuse for the historians of the picturesque school drawing largely on their imaginations for the sake of filling up the shadowy outlines.

Notwithstanding, however, the confident way in which some writers have felt justified in speaking, we have not accessible at present any evidence to show what was the origin and what were the real objects of the movement. Was it a religious war only, a rebellion entered into for the sake of establishing once more the rites of the old religion? or was there mixed up with this, selfish personal ends, and a determination to dethrone Elizabeth and place Mary of Scotland on the vacant throne?

We cannot answer these questions except by guesses until the documents bearing on the period have been sorted and arranged in something like order and sequence. In a

matter of this kind local knowledge counts for very much. We may well despair of knowing the truth until some one who is acquainted with the family history of "The North Countré" shall be moved to investigate the whole matter thoroughly.

Mr. Cartwright has not endeavoured to do this, but he has added to our stores of knowledge by printing in the sketch he has given of the life of Sir Thomas Gargrave a series of hitherto unpublished letters illustrative of the history of this crisis.

Gargrave was a notable Yorkshire worthy in his time—one of those strange combinations of good and evil qualities which cross our path so frequently in the history of the Reformation, and are in such strong contrast alike to the men of the mediæval period and those of modern life.

To Gargrave's energy as much as to that of any one man the Queen owed the suppression of the northern rebellion. But it does not really seem that any of her loyal subjects showed either genius or remarkable energy even, in her service. "The Percy's crescent set in blood," not because the ideas it represented were repugnant to the spirit of the time and called forth patriotic resistance, as the Spanish Armada threats did some years later, but because there was no head to direct, no power to coerce, the motley array of military tenants who had flocked to the rebel standard as soon as they heard their lords had determined on levying war against the southern Queen.

The part Gargrave played was not a military one. All gentlemen were soldiers in some sort then, and therefore it is almost certain that Sir Thomas had received that general instruction in the art of fighting without which he would have been a laughing-stock to his neighbours; but he was a lawyer by profession, and he seems to have served his mistress and made his own fortune in the world by that careful attention to the details of business which Elizabeth and her ministers valued much more than any imitation, however dexterously accurate, of the chivalrous manners of the bygone time. A man of knightly feelings, indeed, would hardly have relished some of the work which the Queen handed over to him. In January, 1568-9, he was instructed to assist Sir Francis Knollys in conducting the captive Queen of Scotland from Bolton Castle to Tutbury. A stronger proof of confidence could hardly have been given than selecting him for this hateful task. In a letter he wrote in the April following he alludes to this employment, and tells his correspondent, the Earl of Sussex, Lord President of the North, that Mary "hayth herd wekely at this Lent 13 sermons, every Sunday, Wednesdays, and Friday one, whereyn she hayth ben well perswadyd to the Redyngs of Scriptures."

The ruthlessness with which the northern insurrection was suppressed, or, to speak accurately, the cruelty which was shown when all resistance was over, has been little dwelt on by historians, though it is well known to those who have studied the history of the time in original documents. The papers printed here furnish a horrible illustration of this spirit. "As soon as the flight of the rebels was clearly ascertained the President of the Council issued warrants to the Sheriffs of Northumberland, the Bishoprick of Durham and Yorkshire, to seize into the Queen's hands all the lands, goods, and cattle of the rebels and their supporters, and to apprehend their persons. It was ordained that in every special place, where they gathered any strength, and in every market town or great parish, execution should at once take place, by martial law, of such as had 'no freehold, nor copyhold, nor substance of lands.'"

The object of this barbarous order is clear enough. The landed men were not to be put to death by martial law,

because if executed in this off-hand manner they would not be felons in law, and their estates would not escheat to the Crown; but the poor hinds, tradesmen, and mechanics who had done the bidding of their feudal lords were not worth trying. They were to be hanged out of hand at once like dogs. At Ripon, Topcliffe Wetherby, and Tadcaster the executions were perhaps the most numerous. But there was scarcely a parish throughout the whole of the disturbed districts where the body of some poor "papist," unknown to us by name even now, but well known to the villagers around, did not rot on a gallows for the purpose of terrifying his neighbours into loyalty to the Tudor Queen.

Mr. Cartwright prints a few passages which bear upon the history of the penal laws; but the information on that head is not so full as we could wish. There is one passage, however, in a letter from Gargrave to Cecil, written the year after the rebellion, which must not be passed over. It shows that however we in happier times may blame Elizabeth and her ministers for severe laws against Roman Catholics, they were censured in their own time for too great laxity not by religious fanatics only, but by capable business men, whose feelings about religion may without injustice be assumed to have been kept in strict subordination to their politics.

"Yf any refuse the servyce or communion, I wold wyshe them," Gargrave says, "convynct by opyn disputation in every shyre before Comysyners; and yf they wyll not relent to the treuth, I wold wyshe them attayntyd in *premunire* for one yere, and yf they stycke at the yeres end, then to be dethe for herseye or treason."

Sir Thomas Gargrave survived the rebellion upwards of ten years. He died possessed of a large estate, the greater portion of which had been acquired by his own labour. In the latter years of his life he dwelt at Nostel Priory, near Wakefield, not in the present princely residence, which was built in the middle of the last century, but in the old priory, much of which remained until it was demolished, when the new house arose.

The early chapters of the book, as they relate almost entirely to events of national importance, are by far the most interesting; but the whole is well edited, and will richly repay reading by those who desire to comprehend the social life of their forefathers.

The chapter on "Towns and their Trades" contains new and important information. EDWARD PEACOCK.

THE HISTORICAL MSS. COMMISSION.—III.

THE Royal Historical Commissioners, whose second Report was noticed in the *Academy*, No. 21, have now issued their third Report, giving accounts of upwards of a hundred public and private collections which have been examined and reported upon during the past year. They also report that two important collections, that of the Earl of Macclesfield, purchased by the British Museum, and of the Earl of Shaftesbury, deposited by him in the Record Office as a free gift to the nation, have become public property. The most valuable portion of this gift is the correspondence and papers of the third Earl—author of the "Characteristics"—and those of John Locke, notably among the latter a copy in Locke's hand, with his own corrections, of the first set of constitutions for Carolina.

Historical students will rejoice to learn that the great treasury of manuscripts well known as the Cecil Papers, belonging to the Marquis of Salisbury, has been thoroughly examined. This, the most valuable private collection in the kingdom, consists, Mr. Brewer reports, "partly of ancient vellum MSS. of early date, partly of correspondence, commencing with the reign of Henry VIII., and ending with that of Charles II." But the mass of the papers refers to the reigns of Elizabeth and James I., and minutely illustrates the events of the whole period. The index alone to the documents belonging to the reign of James takes up thirty closely printed pages. Among the Elizabethan archives are papers relating to the Queen's personal history before her accession, and important documents bearing upon the intrigues con-

nected with Mary, Queen of Scots. Among the latter was found one of the casket letters, a valuable discovery, for though it forms part of the series already known, and is numbered by Lord Burleigh in his peculiar fashion, its handwriting differs from that of the rest, and the French, in which it is written, has undergone numerous corrections. Only second in importance and extent to the MSS. at Hatfield House are those belonging to the Marquis of Bath. This collection is remarkably varied in character, amply illustrating, and from very early times, the civil, military, naval, ecclesiastical, and literary history of the country. Among the numerous remains of early English and French prose and verse, the French original appears of a poem given in Joshua Barnes' Life of Edward III., as having been composed in Latin by Edward II. while in prison. Its historical treasures include the famous Red Book of Bath, an early fifteenth century volume of legal and historical miscellanies; a Chronicle of London from Richard I. to Henry VI., more full than that published by Sir Harris Nicholas; two fine copies of Higden's Polychronicon, and one of Bellenden's History of Scotland. Among legal works are ancient copies of Bracton, Britton, and early statutes and law tracts. There are numerous ancient registers of lands and charters, household inventories, and accounts of the sixteenth and seventeenth centuries, &c. The original correspondence at Longleat is very important; it includes numerous letters by Queen Elizabeth and members of her Council, some of them touching upon the intended execution of the Queen of Scots. There are also letters by Charles I. and II., nine original letters from Cranmer, others by Parker and Whitgift, Hatton, Bodley, Coke, Raleigh, Bacon, Cecil, Buckingham, and other celebrities. The literary correspondence includes that of Matthew Prior, letters by Swift, Pope, Locke, Gibbon, &c. Among other matters of interest is an account-book of Arabella Stuart, on the last leaf is a note of her marriage, with the date and names of the witnesses; the marriage-settlement of Amy Robsart, with a letter in her handwriting, and a list of splendid jewels given away by Prince Charles on leaving Spain.

The Duke of Northumberland's extensive collection includes documents illustrating the state of Ireland towards the close of the sixteenth century, and others bearing upon the English settlements in that country. It is rich in documents illustrating the Civil War and the period of the Restoration; notices of the Duke of Monmouth and his rebellion, &c. The Duke of Devonshire has *inter alia* a long and valuable series of household books of the sixteenth and seventeenth centuries, notices of the Civil War, and letters of Court gossip *temp.* James and Elizabeth; one of the latter describes Arabella Stuart's visit when a child to Court, how the Queen was cold, and Burleigh genial, how he praised her Italian and music, wished she were older, and "with that rownd Mr. Rawley in the eare, who answered him it would be a happy thing." The Marquis of Westminster possesses a fine copy of Henry of Huntingdon's Chronicle, containing a contemporary (twelfth century) drawing of Baldwin Fitz-Gilbert about to harangue the Royal army before the Battle of Lincoln, by order of King Stephen; many valuable charters and a large mass of historical papers. The diplomatic papers of Sir Charles (afterwards Lord) Whitworth running over the first quarter of the eighteenth century are at Buckhurst, Earl Delawarr's seat; the Earl of Chichester possesses the extensive correspondence of Thomas, Duke of Newcastle, from the time when he took office in 1724, up to 1768, containing valuable information for the history of the country, its political parties, and its foreign relations.

In Lord de Lisle's library at Penshurst are upwards of four hundred early charters to the Abbey of Robertsbridge; numerous papers relating to Ireland and Wales under the governorship of Sir Henry Sidney, *temp.* Elizabeth; many volumes of letters to the Sidneys in the sixteenth and seventeenth centuries; a notice of the fact that Sir Philip Sidney, when a child of ten, held church preferment; and other unpublished matter of great interest. Sir Henry Bedingfield's series of letters showing the names and treatment of prisoners in the Tower, *temp.* Queen Mary, is noteworthy. The Rev. Walter Sneyd has holograph letters by Queen Elizabeth, Mary Queen of Scots, James I., Charles I. and his Queen, Charles II., James II., and his son James, William III., the Duke of Marlborough, and other historical personages.

He also possesses the diary of the travels of Alessandro Magno, a Venetian who visited England early in Queen Elizabeth's reign. Among Mr. Egerton Warburton's papers are letters by Hobbes, Cowper, Coleridge, and many other literary celebrities of the seventeenth, eighteenth, and nineteenth centuries. In the muniment room of Mr. le Strange, of Hunstanton, are numerous letters ranging from the fifteenth to the eighteenth century, churchwardens' accounts covering the same period, and important household books of the fourteenth, sixteenth, and seventeenth centuries. In the Neville Charter Chest are interesting news letters, mainly written from London, by Count Gastaldi, agent in England of the Genoese Republic from 1739 to 1760. Sir Henry Gunning's collection is exclusively diplomatic, comprising the official correspondence of Walter Titeley and Mr. (afterwards Sir) Robert Gunning; the former was Envoy Extraordinary at the Court of Denmark from 1728 to 1736, and the latter held the same post at the Courts of Denmark, Berlin, and St. Petersburg, from 1766 to 1774.

Mr. Riley's second Report of the documents belonging to the Dean and Chapter of Wells describes a large number of ancient deeds, some of which illustrate the early history of the Wellesleigh family; a conveyance establishing the fact, hitherto disputed, that Henry Beaufort was Dean of Wells; two letters written by Edward II., and Thomas, Earl of Lancaster, after the Battle of Bannockburn, pressing Bishop John de Drokenesford to forward certain moneys; exemplification of the charter, "De Prisis bonorum," to Edward I.; and the original copy, deposited in the Church of Wells, of the sentence fulminated by the Bishops of England against those who should violate the liberties contained in the Charters of England 37 Henry III.—perhaps the only original copy now extant. Among the documents of the Corporation of Bridgwater, mentioned in Mr. Riley's second Report, are a Welsh-English religious poem of the fifteenth century, a lease written in Somersetshire-English of that date, while a contemporary specimen of Irish-English is furnished through a communication from the Town Council of Youghal to that of Bridgwater, A.D. 1475. Here are upwards of a thousand deeds relating to transfers of property between the reigns of Henry III. and Henry VIII.; also above a hundred documents referring to the town and university of Oxford, mostly in the reigns of Edward IV. and Henry VII. The municipal records of Axbridge offer interesting illustrations of social, religious, and civic life in a West of England town in the Middle Age. At Totnes, the Rolls of the Mayor's Law Court, fifteenth century, supply the particulars of the building of the parish church tower; and conspicuous among still more ancient records are the various rolls of its Merchants' Guild, beginning A.D. 1260, and coming down to 17 Edward III. (A.D. 1343). The border town of Berwick-upon-Tweed has a large number of early archives. They date as far back as the reign of Edward III., and from the accession of Elizabeth the series is tolerably complete. On the other hand, Kingston-on-Thames preserves no records earlier than the reign of Henry VII.; its churchwardens' accounts of that time present notices of May-day minstrels, morris dancing, and "Robin Hood games." John Bowtell, a Cambridge bookseller, left in the first quarter of this century to Downing College his collections illustrating the history of the county, university, and town of Cambridge. Most of these papers, none of which are in print, are of special interest and value. Noteworthy among others are the series of accounts of the town, ranging from A.D. 1510 down to 1787; collections made in the seventeenth century for a history of each of the Cambridge colleges; the gossiping commonplace book of J. Wickstede, mayor in 1613; and the diary written in somewhat Pepysian fashion of John Newton, a Cambridge burgess, in the latter part of the seventeenth and beginning of the eighteenth century.

In Scotland Mr. Fraser has made a second report on the muniments and archives of the Duke of Montrose. He describes (1st) the official correspondence of the first Duke from 1700 to 1755. Besides a holograph letter of thanks from Queen Anne for his services in promoting the Union between England and Scotland, this includes the Duke's correspondence with John, Earl of Mar, and many leading statesmen; a series of letters referring to the insurrection in the year 1715; and notices respecting the proceedings of Rob Roy. (2.) The charters and correspondence of the Earls and Dukes of Lennox from 1177 to 1603. Here is an unpublished letter from Queen Mary to her father-in-law,

the Earl of Lennox, complaining of Darnley's conduct towards her, and also a letter of James VI., written in his ninth year, to Captain Thomas Crawford, who had taken Dumbarton Castle by stratagem; another holograph letter of James VI., probably written about 1600, refers to raising money to promote his succession to the English crown, and a third dated March, 1603, requests the Duke of Lennox to accompany him to England. (3.) The Menteith muniments, containing many ancient charters, and several unpublished letters from Charles I. and Charles II. Lord Seafield has at Cullen House a fine series of family charters illustrating the succession to the lands from 1437 downwards; writs of the foundation of the collegiate church of Cullen, among them a charter of endowment by King Robert Bruce. Later papers include Queen Anne's "private instructions" to the first Earl of Seafield, as Commissioner to the General Assembly in 1703, and a series of letters from Lord Hardwicke, 1747 to 1764, bearing on the settlement of the country after the rebellion. The charters at Crawford Priory are not less remarkable. "One of them," says the Report, "is a charter by William of Keith and his wife at their Manor of Kynntor in 1380, remarkable for preserving in the list of witnesses a picture of the little Court assembled within the walls of this great baron. It numbered representatives of the baronage, of literature, and of trade. They were Robert, Earl of Menteith, James and Alexander of Lyndesay, knights, John Barber, Archdeacon of Aberdeen, William of Fenton, Alexander of Stratoun, and John Crab, burgess of Aberdeen. Here we find the future Regent of Scotland, with the poet Barbour, and a wealthy burgess of Aberdeen, descended from Crab, the Fleming, who helped to defend Berwick in the time of Edward II." The papers of Sir Patrick Murray are numerous and important. Among them is a record of a series of Baron Courts held on the Moothill of Langforgrund in 1385, partly written in Scotch, and presenting a specimen of the vernacular contemporary with Barbour's Bruce. The collection of Mr. Dundas, of Arniston, is rich in illustrations of local and national history; the charters begin with a series of deeds of the Knights Templars, the earliest dated 1354;—there are numerous miscellaneous documents dating from 1538;—household and estate account-books full of valuable statistics during the next century; and a large mass of correspondence coming down to 1819, more or less of a public character. The letters belonging to Mr. Webster, Aberdeen, are equally valuable; they include letters from Cardinal Beaton, the Regent Murray, different members of the royal family of Stuart, and several statesmen of the seventeenth century. At Wemyss the series of family records begins in 1250. There is a large collection of letters from the sovereigns of Scotland and public men; others from Charles I. and II., General Monck, Archbishop Sharp, &c. The records of the university of Glasgow are full and complete from its foundation in 1450; in addition to these Dr. Stuart describes the very valuable manuscripts, many of them beautifully illuminated, and other original records preserved in the Hunterian Museum.

In Ireland Mr. Gilbert reports on the Ormond archives, which are found to be rich in unique documents from the twelfth century, and in MS. books, State papers, correspondence and miscellanea to the early part of the eighteenth century. The whole collection is of the highest historical interest and of truly national importance. Dr. Russell gives an interesting account of the famous ancient cartulary, known in Ireland as the *Liber Nigir*, or Black Book of Limerick. Its entries, beginning 1194, consist of papal rescripts, charters, and other documents, throwing light not only on the antiquities and topography of Limerick, but also on the social history of the Anglo-Irish community. Dr. Russell especially notices one curious document, an inquisition taken 1201, under an order of Meyler Fitz-Henry, Grand Justiciary, by William de Burgo, of the property of the Bishop of Limerick. The inquisition was held under a jury representing the three classes of the citizens, and was *trilingual*, consisting of twelve Englishmen, twelve Irishmen, and twelve *Ostmen*, or *Danes*. This is noteworthy as illustrating the strong foothold which the Northmen had at that period taken in the seaboard towns of Ireland. Not only in Waterford and the towns of the eastern coast were they fully established as an important part of the community, but here we find them holding the same place in a remote western port such as Limerick.

Among the special subjects upon which the present report throws additional light may be mentioned (1) The history of religious and craft guilds in England. Apart from scattered notices of these ancient associations, there is, belonging to the Marquis of Bute, preserved intact the Book of the Gild of the Holy Trinity of Luton, Beds., written in English during the first half of the sixteenth century. Its accounts are full, illustrating the history of the fraternity, its religious observances, the ritual and ancient state of Luton Church, the rate of wages and price of materials; it gives also the items, with their cost, of the annual gild feasts, &c. The companion volume is its register, richly illuminated and furnishing the names of all members enrolled from 1475 to 1546. The History of English Gilds, published by the E. E. Text Society, includes neither these records, nor those of the Merchants' Gild of Totnes preserved in the archives of the Corporation. Here are several rolls of the Gild, with entries full of curious details, beginning A.D. 1260, and coming down to 17 Edward III., A.D. 1343.

(2.) Among Biblical Manuscripts may be mentioned the inestimable seventh century copy of St. John's Gospel, said to have belonged to St. Cuthbert, and now in the library of Stonyhurst College. The Rev. Sir W. Cope, among other valuable ancient books formerly the property of different abbeys, possesses a splendid Evangelium, end of tenth or beginning of eleventh century, only second in beauty to that of Col. Carew described in the former Report. The Marquis of Westminster also has a beautiful Evangelium (thirteenth century); the Marquis of Bute an early thirteenth century Greek Book of the Gospels, and an English metrical paraphrase of the Gospels, fourteenth century, while at Longleat is part of a sixteenth century copy of a poetical version of the Old Testament, and early MSS. of Wyclif's translations.

(3.) Apart from Wyclif MSS., the collection at Longleat is rich in valuable works illustrative of early English literature. A large body of religious prose and verse belonging to the fourteenth and fifteenth centuries includes works by Richard de Hampole, Walter Hylton, John Morton, Bishop Alcock, anonymous religious tracts, Passion poems, &c. Here are also many pieces by Lydgate, Chaucer's Knight's Tale, and Grisilda (1400); the Persone's Tale, a fifteenth century copy. In a small folio (middle of fifteenth century) of minor poems by Chaucer and Lydgate, sixteen leaves containing, as shown by the table of contents, the Flower and the Leaf, with the first part of the Complaint of Mars, are unfortunately missing. Connected with Chaucer is a long letter from Hearne, the antiquary, Oxford, 28 May, 1709, concerning the poet and the various editions and copies of his works. At Alnwick Castle is an MS. of the Canterbury Tales. In the Hunterian Museum are E. E. sacred poems, Trevisa's translation of the Polychronicon, works by Gower, an MS. of the Canterbury Tales (late fifteenth century), and the copy, unfortunately still unique, of the Romaunt of the Rose. The Marquis of Westminster's highly interesting fifteenth century MS. of Piers Plowman presents variations from the texts lately printed by the E. E. Text Society. Mr. Legh, of Lyme, has a fine early copy of the Scottish Field, an alliterative poem; the Rev. Sir W. Cope a long poem, *circa* 1500, on the life and Passion of Christ, and the Rev. Walter Sneyd an early MS. of Sir John Manderville's travels, and medical treatises of the sixteenth century.

This Report being particularly rich in documents illustrating the history and personages of the seventeenth century, it will be worth while to select from its various collections the most interesting papers connected with that eventful period for the purpose of presenting them in chronological sequence. Among the Phelps' MSS. are preserved the archives of the Gunpowder Plot (1605); papers and a series of letters bearing on the Spanish Match, and notes of the evidence against Lord Bacon, with an original letter (7th September, 1619), mentioning that the King had received five hundred articles of complaint against the Chancellor, had said that were they proved he would make him an example to all ages, and threatens to hang him. The Report mentions many original letters from Bacon—one November 13, 1619, gives Buckingham the news that Lord and Lady Suffolk are fined £40,000 and imprisoned—and all the documents connected with the Chancellor's impeachment. Correspondence and papers connected with and by Sir W. Raleigh are likewise numerous; the former, mostly dated from the Tower, include letters to his wife, to Cecil, the Privy Council, and the King.

One to James (1607) concerning Guiana is probably still unprinted; another addressed to Sir Francis Bacon appeals to him "to spend some few words to ye putting of false flame to flight." The State and other documents throwing light on the affairs of the Palatinate are noteworthy, especially a series of letters, dating from 1619 to 1637, on the subject, and a highly interesting volume of family correspondence formerly belonging to Prince Rupert, and containing the letters of the Elector Frederic to his wife, the Queen of Bohemia, giving in detail the progress of the war and his disasters, with others addressed to her by her sons, Charles and Rupert, and her royal relatives in England.

Among the important contributions which appear in this Report towards a history of religious parties under James I. may be specified—a petition of the commonalty in Sussex complaining of the tyranny of the ecclesiastical courts, and setting forth the dearth of religious instruction throughout the county (1603); various collections showing the same state of things in existence throughout Cornwall, Staffordshire, and Lancashire; lists of presentments for non-attendance at church; treatises concerning the disagreements in the Anglican Church, &c. Here is a letter from Williams, Bishop of Lincoln, to the minister of Grantham touching the placing of the communion-table. It is to stand not "altarwise," but "otherwise," and in any "place in the church or chancel where the minister may be conveniently heard." Also a characteristic letter (*circa* 1612), printed in full, from Abbot, Archbishop of Canterbury, to Matthew, Archbishop of York, urging him to use severer measures against recusants. The Bishop of Southwark has a remarkable series of various documents illustrating the condition of English Catholics throughout the century, and at Stonyhurst is a still more important mass of papers connected with the same subjects. Lastly, the library of the Rev. Dr. Williams, Bloomsbury, contributes highly valuable materials for the history of Nonconformity.

Passing on to the reign of Charles I., we find in the library of Sir Rainald Knightley a MS. account of the Parliament of 1625, written *de die in diem* by a Member of the House, and furnishing considerable additions to our knowledge of that important session from which the breach between the King and Parliament dates. Among the archives of the House of Lords are ten Minute Books, *i.e.* records of their proceedings, ranging from the last years of James I. up to March, 1644-5; papers connected with Archbishop Laud's visitations, and a set of documents dating from February, 1630-1, to March, 1639-40, respecting John Dury's mission to the continent, made under Laud's auspices, for the purpose of effecting a pacification between the Lutherans and Calvinists. Here too we meet with a document which takes up a loose link in the history of Strafford's trial—Pym's copy of Sir Harry Vane's notes of speeches made by the Earl and others at "a giunto" of the Privy Council for the Scotch affairs, 5th May, 1640. In fear of consequences to Strafford, Vane had destroyed the original; but this copy, read in both Houses, and fraught with evidence fatal for the Earl, greatly helped towards the passing of the Act of Attainder. To the Duke of Northumberland belongs a large mass of papers illustrating the history of the Civil War; some of these show the poverty of the Exchequer and debasement of the coinage in 1640. Here is a copy, certified by Sir John Borough, of the Lords' letter from York, 25th September, 1640; a copy of the letter of the King's Commissioners at Ripon, 21st October, 1640, varying from that among the State Papers; speeches and notes of speeches in Parliament, 1641 and 1642; also many letters and papers of interest touching the progress of the war. The Duke of Devonshire has an important series of letters (1633-48) containing details of the struggle in the North between the Royal and Parliamentary forces. In other collections we find papers touching Parliamentary levies in various Bedfordshire parishes (1642-3); others about Royalist levies in Norfolk; letters relating to the movements of the King's army in Wales under Byron; a full account of the defence of Brampton Bryan Castle, Herefordshire, and scattered papers illustrating the general distress entailed upon the community during the Civil War. The only known evidence of Cromwell having been a captain of foot is here supplied by a warrant, 17 December, 1642, from the Earl of Essex, for payment of moneys to "Captain Oliver Cromwell," with a holograph letter by Cromwell requesting the payment to be made to George Barton, his servant. The original of Sir Bulstrode Whitelocke's account of his em-

bassy to Sweden, under the Commonwealth in 1653, exists, as is well known, at Longleat. But among the papers of the Marquis of Bute a most valuable recovery has been made of the missing "Annals" of Whitelocke—an autobiography in his own handwriting, mainly in the form of a diary, and recording his personal history from his birth in 1605 up to July, 1675, about a month before his death. GEORGE WARING.

Contents of the Journals.

Von Sybel's *Historische Zeitschrift*, erstes Heft. 1873. Pauli reviews Freeman's *Norman Conquest*, vol. iv., especially praising Freeman's account of the commercial rights already existing at Exeter, Lincoln, &c., and the way in which he uses the historical information contained in Domesday.—An article on "Dante and the Two Confessions" shows that Dante, starting from Catholicism as his basis, has in many points emancipated himself from the priestly theory, and so far approximated to Protestantism.—An account of Von Harrach's mission to Spain, 1696-7, supplies a clear picture of the relations of the Spanish Court to Austria and France just before the war of the Spanish Succession.—Max Lehmann gives a critical and instructive analysis of the French accounts of the war of 1870 up to the siege of Metz.—The literary notices contain a summary of Brunner's "Origin of the Jury System." Brunner traces it back through the Normans to the Frankish kings, who introduced this mode of investigating a charge as a means of so far setting aside the popular law of trial, much as the Roman pretors allowed modes of trial which practically did away with the *Jus Civile*.—There are also short notices of the late publications of the *Rolls Series*, Stubb's edition of Hoveden, Hardy's Catalogue of Materials, Twiss's Black Book of the Admiralty, and Gilbert's Irish Documents. The number concludes with a sketch of the proceedings of the Hanseatic Historical Society and the Munich Historical Commission. The whole number is a very good one.

New Publications.

- DAMUS, R. *Die Slavenchronik Arnolds' von Lübeck*. Lübeck: Grautoff.
- DEVIC, Dom. CL, et VAISSETTE, Dom. J. *Histoire Generale de Languedoc*. Alph. Picard.
- HÖFFLER, C. *Wahl u. Thronbesteigung des letzten deutschen Papstes Adrians VI. 1522*. (Academy Reprint.) Wien: Gerold's Sohn.
- JACOB, P. L. (le bibliophile). *Les Courtisanes de la Grèce, d'après les auteurs grecs et latins*. Nice: J. Gay.
- JANSEN, G. *Rochus Friedrich Graf zu Lynar, königl. dän. Statthalter der Grafschaften Oldenburg u. Delmenhorst. Zur Gesch. der nord. Politik im 18^{ten} Jahrdt*. Oldenburg: Schulze.
- MOLESWORTH, W. N. *History of England from 1830*. In 3 vols. Chapman and Hall.
- MOREAU DE JONNÈS. *L'Océan des anciens et les peuples préhistoriques; études sur la géographie primitive*. Paris: Didier.
- NIESKE, B. *De Stephani Byz. auctoribus. Commentatio I.* Kiel: Schroeder.
- PALMER, W. *The Testimonies concerning the Patriarch Nikon: and History of the Condemnation of the Patriarch Nikon*. (Vols. II. and III. of the Patriarch and the Tsar.) Translated. Trübner.
- SCIOUT, Ludovic. *Histoire de la Constitution civile du clergé (1790-1801). L'Eglise et l'Assemblée constituante*. Paris: Didot.
- TETTAU, B. J. A. *Ueber die epischen Dichtungen der finnischen Völker, besonders die Kalewala*. Ein Vortrag. Erfurt: Villaret.
- THOMAS, G. M. *Die ältesten Verordnungen der Venezianer f. auswärtige Angelegenheiten*. Aus archivalischen Quellen (Academy Reprint). München: Franz.

Philology.

- On a Cuneiform Inscription describing the Deluge; by G. Smith. Read before the Society of Biblical Archæology, December 3rd, 1872.
- Chaldean Account of the Deluge. Photographed by Steph. Thompson, with translation by G. Smith. W. A. Mansell & Co. 1872.
- Le Déluge et l'Épopée babylonienne, par Fr. Lenormant. Reprinted from the *Correspondant*. Paris, 1873.

THE discovery of the native Babylonian account of the Deluge, which has rewarded the patience and skill of Mr. G. Smith, is one of the most important and valuable ever made in the province of archæology. The trustworthiness of Berosus has been confirmed in the most decisive way, thus enabling us to rely upon his statements where they are

not corroborated by the monuments; and a new light is thrown upon the origin and meaning of Western Asiatic mythology. The story of the Flood, instead of being borrowed by the Chaldean historian from Genesis, must have been derived by the Hebrew writers from Babylonia. There alone is it significant, and a part of a great epic cycle.

The narrative is contained in the eleventh tablet of a series of twelve which record the adventures of a mythical hero who may provisionally be called Gisdhubar or Gisdhumas. The British Museum possesses three mutilated copies of these (from the library of Assur-bani-pal). Mr. Smith has found and pieced together about eighty fragments of them. The original text came from Erech, and must have been translated into Semitic at an early period, since the three Assyrian copies present variant readings, have incorporated glosses into the text, and have sometimes retained the original hieratic characters when their modern equivalents were unknown. Mr. Smith's unrivalled powers of deciphering guarantee the substantial correctness of his translation, and those who are able to test it know that his renderings are fully to be depended upon, except of course in the doubtful reading of certain proper names.

Gisdhubar and his servant Hea-bani, according to the legend, went to seek the translated son of Ubara-tutu, the Sisuthrus of Berosus, whom Mr. Smith calls "Sisit." After forty-five days the mouth of the Euphrates is reached, where "Sisit" stands on the other side of the waters of death.* He tells Gisdhubar the story of the Flood: how on account of his piety the gods of his "ancient city" Surippak warned him of a deluge that was about to destroy all mankind for their sins, and how Hea ordered him to build an ark. The height and breadth of this were the same, and it was coated within and without with bitumen. This preserved "Sisit" and his family and pilot, with "all the seed of life," for the seven days during which the deluge (sent by the sun-god) was raging. "All life" was "destroyed," and the ark finally rested on "the mountain Nizir" (*Sad-u Ni-sir*). After seven more days "Sisit" opened the window and sent forth a dove, which returned, then a swallow, which also returned, and finally a raven (*aribi*). Then he left the ark and built an altar on "the peak of the mountain" (*'siggurrat sadi*), cutting herbs "by sevens" (*'siba' u' siba'*); and the gods smelt the sacrifice, and at Hea's prayer Bel made a covenant with "Sisit" and declared that he would not again destroy man with a flood for his sins. After this "Sisit" was translated.

Mr. Smith adds to his translation a comparison of the cuneiform narrative with the accounts of Berosus and Genesis, but does not attempt any further analysis of the legend. Sir H. Rawlinson, however, in a letter to the *Athenæum* (December 8th, 1872) suggested that Gisdhubar was a solar hero, the twelve tablets recording his labours during the twelve months of the year. The eleventh month was the month "of rain" in Accadian, whence the name of the zodiacal Aquarius; and this would suit the Deluge-myth as perfectly as the conquest of the winged bull by Gisdhubar in the second tablet agrees with the second month "of the favourable bull" (Taurus) or his marriage with Istar in the sixth tablet with the sixth month "of the errand of Istar." The suggestion is borne out by the correspondence of the legend of Bul, a sea-monster which demanded an annual tribute of young girls for its food and was slain by Gisdhubar and his huntsman Tsaid, with the fourth month of "the seizer of seed" (Cancer). The legend is compared by Lenor-

* Tuoni is the river of death in the Kalewala. The river Datilla is called "the lord of the house of death" in W. A. I. ii. 62, 50, and Tu, "the setting" sun, is given as the god of death (W. A. I. iii. 67, 21).

mant with the myth of Perseus and Andromeda, which Eckstein has traced back to Babylonia, where the inhabitants were originally called Kepheneš according to Stephanus of Byzantium. I believe that the third tablet, answering to the month of "the twins," or "the bricks," as it is also named, will be found to contain a story not unlike that of Cain and Abel, and of the foundation of the first city, Enoch.

M. Lenormant's pamphlet is an acute and learned commentary on the inscription. He shows from the traditions given by Berosus, as supported by the evidence of the monuments, that the Accadians possessed a connected epic cycle, like the Kalewala of the Fins or the Kalepœg of the Esths, which included the episodes of the creation, the ten antediluvian kings, the Tower of Babel, &c., copied by Greek writers from Berosus. This cycle was borrowed by the Assyrians along with the old theology and literature; but I much doubt whether the Assyrians ever had an epic of their own, such as M. Lenormant believes he can recover from the pages of Ktesias, and whether M. Rénan's view that the Semite could never originate an epic is not after all the true one. The descent of Allat of Cutha, another form of Istar, into the land of the dead, which is translated in Lenormant's "Essai de Commentaire des Fragments de Bérose," Frgt. xx., belongs to this epic. After lamenting the premature death of her husband "The Son of Life," Allat passes through the seven gates, at each of which she leaves part of her apparel, down to Hades and the golden throne of the Anunnaci, where she is purified by Mamit, Istar, and Hea, who has been fetched by his son the Sun-god. The story clearly refers on the one side to Tammuz, and on the other attaches itself to the legend of the sixth month. We may compare the legend of Tammuz in Ibn Wahshiya, and the lament of the gods over him in the Temple of the Sun.* This is noticed by M. Lenormant, who refers to the transformation of the Vedic deities into the Iranian leaders of the first generations of mankind, and then goes on to review the Hindu account of the Deluge. This is first found in the 'Satapatha-Brāhmaṇa; and Eugène Burnouf long ago proved that it had come into India from a foreign source. The fish that aided Manu would be "the saving fish-god" Hea, the earth primarily, and then the deity of the hearth and the river. As the planet Mercury, Merodach, "the eldest son of Hea," was called "the fish of Hea" (*kha-Enu-ci*) in the month of Adar (February); and I would explain the double fish of the modern zodiac by the fact that the last month of the year was a double one through the intercalated Ve-Adar (Accadian *dir-se*). M. Lenormant suggests that, like the legend of the Deluge, the churning of the sea by the help of the serpent Vāsuki also made its way into India from Babylonia; and he reminds us that Tiglath-Pileser II. penetrated as far as the valley of Indus, while Sennacherib speaks of the precious wood of *Sinda*, and Col. Taylor has found pieces of teak at Mugheir. We may add to this the mention of *Mitra* in a mythological tablet as a name of the sun. Von Bohlen long ago ventured on the conjecture that 𐎠𐎵 in Gen. iii. (a misapprehension of 𐎠𐎵) was India, and the land of Andiu, which is described by the Assyrian king as "a distant place" (W. A. I. i. 35, 9), may very possibly confirm this, the loss of the initial sibilant showing that the name had made its way into Assyria through the medium of a Persian population.

The more I investigate the mythology of Accad, the more

* Tammuz, we are told, belonged to the Janbans or Janbasiyans, the primeval inhabitants of Babylonia. Perhaps we may discover *Gan-duni* or *Gan-duniyas* (Southern Chaldæa) in the جَنْبَان of Dimeshki and the variant readings with an inserted sibilant of El-Marrizi (Chwolson, "Die Ssabier," ii. pp. 414, 607, 680).

I am convinced that it is for the most part of solar origin. The larger part of the gods, such as Adar, "the sun of the south," or Rimmon, "the south sun in Elam," resolve themselves into the great luminary of day. Hence it is not surprising that the epic cycle of Babylonia should revolve round the same centre. Gisduhar, whose ship is called "the ship *gis-tuk*" in W. A. I. ii. 46, 3, may be the god of fire, with *dhu*, "mass," or "body," inserted in the middle of the compound; and the name read "Sisit" by Mr. Smith means "the sun of life," which would be pronounced *Tam-si* in Accadian. It is impossible not to compare this with Tammuz. The character of Tammuz, however, better suits the first husband of Allat-Istar, whose name would be read in Accadian *Dū-si* (see W. A. I. iii. 70, 120). Now this exactly agrees with *Dūzu*, the Assyrian form of the month Tammuz, and we can only account for the variant Tammuz by a confusion of *Tam-si* and *Dū-si*, two several forms of the sun. *Dū-si* is associated with *Cittu*, the sun, in W. A. I. ii. 59, and Istar seems there to appear as his mother. The translation of *Tam-si*, on the other hand, leads us to the Biblical Enoch, whose name (like that of 'Qavvys in Berosus) may be explained by *kha-Enu-ci*, "the fish of Hea," that is, Merodach at the close of the 365 days of the year. Now Merodach was primarily solar, as is shown by his Accadian name *Amar-ud* or *Amar-utuci*, "the circle of the sun," and he might be described as rising either out of the earth (Hea) or out of the water. The name of *Tam-si*'s father, again, *Ubara-tutu*, or "the glow of sunset" (see W. A. I. ii. 2, 254) perhaps reminds us of 𐎠𐎵 "the setting" sun. How *Tam-si* comes to be called Sisuthrus by Berosus it is not very easy to say; since Sisuthrus must be *Susru*, an old Chaldean name of Anu, or Na, "the sky." *Na* or *Nakh*, however, seems to claim kindred with the Biblical Noah, and an ancient Accadian ritual speaks of "the great flood of Anu in the midst of heaven" (W. A. I. ii. 19, 40). It is possible, therefore, that Anu was rather the sky of day, as synonymous with the sun, his mother *Zigara*, or "heaven," being the sky properly so-called; and it is noticeable that Nagidhdha, the wife of Anu, is "the queen-mother, the moon." At the same time a geographical discrepancy has to be admitted: Gutium or Kutu, which seems to be the country between the Euphrates and Syria, is called "the fortress of Anu" (W. A. I. ii. 48, 14), while Nizir was the mountainous district to the east of Assyria, which, according to Assur-nazir-pal, was called by its inhabitants Lullu of Cinipa. Still the situation of Gutium is not quite certain; and we find Anu entitled "the lord of the land of the East" (W. A. I. ii. 54, 45).

A. H. SAYCE.

Library of Anglo-Saxon Prose. [*Bibliothek der angelsächsischen Prosa.*] Von C. W. M. Grein. Erster Band. Cassel und Göttingen: G. Wigand. 1872.

IN the present work we have the first instalment of a series of Anglo-Saxon prose texts by the well-known editor of the "Bibliothek der angelsächsischen Poesie." Dr. Grein says in his preface that he originally looked forward to passing some time in England, so as to be able to take his texts directly from the MSS. instead of having to base them on the often untrustworthy English editions. Unfortunately he has not been able to carry out this plan, and has therefore been obliged, as in his edition of the poetry, to follow the English editions, only regulating the orthography and making such emendations as were possible without access to the MSS.

This plan has, however, been modified to a certain extent. When the present volume was nearly all printed off, Dr. Grein received intelligence from England of the great inaccuracy of the later English editions, with an offer to collate

the proof-sheets of future texts with the MSS. before publication. The present volume being so far advanced, it was not judged advisable to delay its issue till it was collated with the MSS., especially as the edition on which it is based was described as being tolerably accurate. The results of such a collation are, however, to be given in a later volume.

There can be no question that this assistance will greatly increase the value of the series. Indeed, without MS. correction much of it would be worse than useless: only those who have gone through the weary drudgery of correcting such work as the A.S. publications of the Surtees Society word for word by the MSS. can fully appreciate its importance. The best guarantee for the efficient carrying out of the task is the name of the scholar who has undertaken it—Mr. Skeat, of Cambridge. We earnestly hope Mr. Skeat may not be left alone, and that other competent Saxonists may come forward in the same liberal and disinterested way. We should of course like better still to see the burden taken off Dr. Grein's shoulders, and see the work done efficiently by Englishmen; but of this there seems little chance at present.

While wishing Dr. Grein every success in his spirited undertaking, we cannot suppress certain misgivings as to the value of some of his future texts, even with the promised MS. collation. In those cases where they are founded on a single MS. we have nothing to say against the result—instead of the cumbrous, expensive, and often inaccurate English edition we shall have a cheap and reliable text in the most convenient form. Where there is a number of MSS. the case is very different. A reproduction of a single MS. or a text founded on a mass of readings gathered at random from a variety of MSS. of different ages and value cannot be called a "critical" text. The MSS. themselves must first be accurately classed by age, dialect, and genealogy. Now this can only be done by a man who has qualifications which Dr. Grein cannot and does not possess. He is ignorant of A.S. palæography, and can get his knowledge of the MSS. only at second-hand, and seems to know nothing about the chronology and dialects of the language, if we may infer so much from his treatment of the old forms in the poetry. Of the gross misconceptions prevalent both at home and abroad about the chronology of the language I have already given full proofs in the preface to my edition of the A.S. Pastoral, where it is shown that the development even of the West-Saxon dialect has been totally misunderstood.

It is painful to reflect that if Englishmen had done their duty in this matter, and the study of English had been properly supported by our great educational bodies, the work which is now being carried out at a great disadvantage by a foreigner might have been long ago done at home in a complete and satisfactory way.

The present volume contains Elfric's treatise "De Vetere et Novo Testamento," his translations of the Pentateuch and of the books of Joshua, Judges, and Job, with the Latin text at the foot of each page. The spelling is so far normalized that the long vowels and diphthongs are regularly accented, and the thorns are distributed according to Rask's rule. In the case of all other alterations the MS. reading is given at the foot of the page. In all this we think Dr. Grein has shown a sound judgment. The accents and thorns of the MSS. are hardly ever given accurately in the editions, and their restoration would not repay the trouble of collation. It is, on the other hand, to be regretted that Dr. Grein has not abandoned the *v* for *w* and *ā* for short *æ* introduced by Grimm. These arbitrary innovations were never accepted in England (except perhaps by a few servile imitators) and

Scandinavia, and are now being dropped even in Germany. We should also be glad to know Dr. Grein's reasons for retaining the long exploded instrumental in *ē* (*mid flassē*, &c.)

The critical emendations are few, the texts as given by Thwaites and de L'Isle being apparently accurate enough, and many of them are self-evident corrections of scribal or typographical errors. Some, however, of Dr. Grein's alterations we consider unnecessary, such as *answarode* for *answarode* (Exod. vi. 12)—a perfectly legitimate form; others, such as *wateru* for *watera* (Gen. viii. 1), very doubtful; others again, such as *cidhde* and *cydhdest* for *cidde* (Gen. ix. 22) and *cyddest* (Gen. xix. 19), absolutely erroneous. When Dr. Grein begins to collect references for his prose lexicon he will find that *cydde* is the regular late West-Saxon preterite of *cydhan*, and that *cydhde* is almost an archaism at this period. The plur.-pret. *hi abitan* is quite usual, and Dr. Grein's ingenious emendation *abitun* introduces into a late W.S. text a form which is archaic even in Alfredian English. We do not wish to lay too much stress on minutiae of this kind, but they are worth noticing as showing how much caution is necessary in introducing conjectural emendations even into late W.S. texts, and therefore how doubly cautious the editor must be in the case of archaic or dialectic forms.

H. SWEET.

Mnemosyne, Bibliotheca Philologica Batava. Scripsit C. G. Cobet, C. M. Francken, H. van Herwerden, S. A. Naber, W. G. Pluygers, alii. Collegerunt H. T. Karsten, H. J. Polak, H. W. van der Mey. Nova Series, Vol. i., pars i. Lugduni-Batavorum. 1873.

UNDER this title begins a new period of the *Mnemosyne*, a periodical which has already lived longer than any of the similar attempts made of late years in England. Without going into the reasons of this singular contrast, which would involve us in a comparison between the scholarship of the continent and the accomplishments which pass under the same name in this country, we may point to the fact that in the preceding volumes are to be found both the *Varia lectiones* and the *Nova lectiones* of Cobet. The new part begins with an important contribution from the same illustrious scholar on the Scholia to the Odyssey. These Scholia, though much less valuable than the Scholia to the Iliad, have had the advantage of much more attention from scholars. They have been edited by Buttmann, and again by W. Dindorf (Oxonii, 1855), the last being the edition on which Cobet's annotations are composed. Of the numerous and suggestive emendations, given in an article of nearly sixty pages, it would be difficult to point to one about which there could be a doubt. It is to be hoped that the edition of the Scholia on the Iliad, promised so many years ago by W. Dindorf, will appear in time to call forth a similar commentary from Cobet. The remaining articles are:—"Varia," by W. G. Pluygers, chiefly on Catullus and Cicero's letters; "Ad Thucydidem," by H. van Herwerden, valuable notes devoted partly to suggesting emendations, partly to the equally useful task of vindicating the text against those of other scholars—the writer has made a careful comparison of Dion Cassius; "Frontoniana," by J. J. Cornelissen. There is also a short note by Cobet correcting a place in Dio Chrysostomus. Altogether the periodical is full of promise for the future of classical studies in Holland.

Contents of the Journals.

Hermes, vol. vii. pt. 3, contains:—R. Hercher: On Greek prose writers. [Dio Chrysostomus, Apollodorus, Horapollo, &c.]—C. E. Geppert: Arcadius or Theodosius. [In the treatise *περι τῶν*, first published by Barker in 1820, Arcadius merely copied an abridgement made by Theodosius from the first nineteen books of Herodian's *Καθολικὴ προῶδια*, and added a section of the Grammar of Theodosius and an abridgement of the twentieth book of the *Καθ. προῶδια* made by an unknown hand. This appears on comparing three MSS. (Matritensis, Hauniensis, and Bodleianus) which contain the abridgement of Theodosius under his name, with one (Parisiensis 2102) which has also the pieces added by Arcadius. A number of corrections are given from the Matritensis.]—O. Lüders: An artist's inscription from Athens. [*Ἀντιδίου Καλλιωνίδης ἐποίησε τὸ Δεῦλον*, found on one of the funeral monuments which were built into the wall of Themistocles.]—H. Jordan: The results of the excavations in the Forum at Rome. [Deals mainly with two points, the history of the destruction of the Forum in the Middle Ages, and that of its construction or re-arrangement by Cæsar and Augustus. The rubbish (forty feet thick) under which it has been buried is shown to consist neither of gradual deposit nor of the remains of the ancient buildings,

but of stuff shot there at particular times.]—M. Haupt: Conjectanea.—Th. Mommsen: The Roman camp-cities. [Discusses the growth of municipal communities out of the permanent camps of the legions. Such camps were first formed, when the principle of a standing army was recognised, under Augustus, but the notions of "camp" and "city" were long regarded as incompatible, and the legions were not usually quartered in cities. The Pretorians were exceptional. Colonia Agrippinensis, after it received that title, ceased to be the *hiberna* of a garrison. Hence new communities soon grew up round the camps, called (from the booths erected by the camp-followers) *canabae legionis*. Two forms of government may be traced by inscriptions; one more purely military, under a *curator veteranorum et civium Romanorum qui consistunt ad canabas legionis*, another more like but still carefully distinguished from a municipal constitution, under two *magistri* (priests) and an *edilis*. The first camp which received municipal rights without the removal of the garrison was *Vetula* (Xanten), made a colony by Trajan under the name *Trajana*. Of the three quarters of the legions in Britain York was made a colony, the date unknown: the other two, Caerleon (*Castra legionis*) and Chester (*Castra*), were not: hence they never received any other names.]—L. v. Sybel: On Simonides of Amorgus. [Called forth by Ribbeck's criticism of the "Mirror of women" in the *Rh. Mus.* xx. 74.]—Miscellaneous:—C. E. Geppert: "Manuscript Emendations," and "On the Greek Grammarians."—Th. Mommsen: *Quingenta milia*. [On the use of Q or q to denote that number.]—H. Jordan: Expressions of rustic Latin. [*Aqueductum, terrimotium*, instead of the literary *aquae ductus, terrae motus*.]

New Publications.

- ABEN ESRAE, A. Commentarii in librum Esther, altera recensio hucusque ignota, quam ex codice Harleiano ed. Jos. Zedner. Ed. 2. Berlin: Cohn.
- CARNUTH, O. De Etymologici magni fontibus. Berlin: Borntraeger.
- GLANNING, F. Syntaktische Studien zu Marot, ein Beitrag zur Geschichte der französ. Syntax. Nördlingen: Beck.
- GRASSMANN, H. Wörterbuch zum Rig Veda. 2 Lfg. Leipzig: Brockhaus.
- HOFMANN, K. Zur Textkritik der Nibelungen. (Academy reprint). München: Franz.
- NISARD, CHARLES. Études sur la Langage populaire, ou patois de Paris et de la banlieue. A. Franck.
- SCHWEINFURTH, G. Linguistische Ergebnisse einer Reise nach Central Afrika: Berlin: Wiegandt u. Hempel.
- TRUMPP, E. Grammar of the Pasto, or language of the Afghans, compared with the Iranian or North Indian idioms. Tübingen: Heckenhauser.
- VOELKEL, M. C. A. Der Tonwandel in der lithauischen Declination. Tilsit: Loesch.
- ZINGERLE, ANT. Zu späteren lateinischen Dichtern. Beiträge zur Geschichte der röm. Poesie. Innsbruck: Wagner.

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No. 71.]

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THERE is one—perhaps only one—of the criticisms which have been passed on Lord Lytton as a novelist that a candid review of his works will prove to be undeserved. He never wrote himself out. *Kenelm Chillingly* is in all respects a characteristic performance, and will leave its author's reputation unaltered for better or worse. It may be that the characters are unreal, the thought shallow, and the feeling artificial; but from the days of *Pelham* onwards Lord Lytton's works have shown a singular capacity for living through such accusations without needing to live them down. And whatever merits there were in *Pelham* are just as conspicuous in *Kenelm*. The author has kept pace with the times, and unless his public has grown more critical or is *blasé* with the number of competitors for its favour there is no reason why his last success should be less than his first. His subject is still the same, as indeed it almost always was: an affectionate satire upon a young man bent upon rising superior to the age of which he was the pride and ornament, and though never quite succeeding to his own or the author's satisfaction, covering himself with glory in the attempt. *Kenelm's* weak side, we are told in the second volume, was "a passionate longing to find ideal truth in real life." Lord Lytton's weak side was a passionate longing to find ideal truth in his own novels; and he succeeded in persuading himself that his heroes' searchings, though never presented to the imagination as successful, yet constituted the realization of his own ambition. His prefaces—with their plaintive conceit and unconvincing allegory of interpretation—are quite trustworthy as accounts of what he wished to have done, though amusingly out of proportion to what he actually did. If good intentions and capital letters could have turned the walking gentlemen of fashionable melodrama into personifications of Genius, Intellect, Will, Nature, Passion and the various other abstractions which he tried to figure to himself in earthly disguise as Maltravers, Godolphin, Darrell, Alice, Leonard, and the rest,—the prefaces would have been less absurd, as well as less indispensable; and there is no reason to doubt that these characters really repre-

sent all that Lord Lytton could represent of as much as he could apprehend of the inner nature of such ideal entities. But no great artist ever talked so much about his art, and no man of genius ever took so much trouble to describe his own distinguishing quality. The spirit of the ideal declined to grace his pages, so he tried to represent its bodily presence; but it is sufficiently obvious that a novelist who fails in idealising the men whom he had seen is not likely to succeed in personifying the ideal essences that have been always absent from his ken. Thackeray, who was not in a position to criticise his want of speculative profundity or æsthetic intuition, and evidently rather enjoyed his power as a story-teller, has said, better than any one since, all that needs to be said of the absurdities of his earlier manner and the disparity between his advertised intentions and execution. But novelists seldom err by taking too serious a view of their mission, and as Lord Lytton has a right to be tried by the standard he preferred, we will endeavour to do as much justice to *Kenelm Chillingly* as if its author had lived to denounce once more the indolence of inappreciative reviewers and interpret it himself for their confusion.

The first part of the book is rather amusing. The hero—called *Kenelm* by his father, after Sir *Kenelm Digby*, in the hope that he might grow up clever, chivalrous, and muscular, and *Chillingly* by the author, in dark allusion to the frigid influences brought to bear on the present generation—begins his career as the victim and the exponent of New Ideas. On coming of age he addresses his father's tenants with cheerfully discouraging remarks on science, morals, and political economy that prove him not only to have assimilated the most advanced views of that enlightened organ the *Londoner*, but to have reached the still higher point of esoteric wisdom at which those views themselves appear trite and unimportant. He regards the world as a sham, himself as a sham, and solaces himself by launching languid epigrams at his parents, who, having nothing better to do with him, decide that he must travel. A chance encounter with a pedestrian artist determines him to travel incognito and on foot, and the versatility of Lord Lytton's invention is shown by the skill with which he has caught the spirit of a school of fiction with which he could naturally have so little affinity as that of muscular Christianity. *Kenelm* champions two distressed damsels, sets a great

many people to rights morally and intellectually, earns two shillings at haymaking, and swears an eternal friendship with a promising farrier whom he has knocked down and crossed in love. All this is not much in the manner of Godolphin or Eugene Aram, but from the first Kenelm and all the other estimable characters have a way every now and then of talking pure Bulwer for a page or two together without the slightest reference to dramatic propriety, and as the work proceeds the foreign influence wears off, and the hero drops both his cynicism and his aggressive benevolence, retaining only a sceptical contempt for ambition and love, and a good deal of the old-fashioned Bulwer sentimentality. There is not much plot, and the *dramatis personæ* are mostly old acquaintances. The man of the world is a fashionable editor instead of a peer; the inevitable cousin and political rival, who is distinguished as usual from the true hero by more practical sense and less moral sensibility, is much less unscrupulous than in *The Caxtons* or *My Novel*, as if, in spite of the new ideas, the world had after all advanced somewhat in conscientiousness. The artist, whom we had better, if we can, regard as typifying the ideal votary of Nature, has about as much character as Vance in *What will he do with it?* Cecilia, the first heroine, is an equally shadowy figure, but that is no argument against her having been intended to represent the Real, Attainable Domestic Felicity, Practical Life with its pleasures and duties, or anything else of the same sort. As to Lily, the second and principal heroine, who converts Kenelm back from the New Ideas to a saving sense of the importance of public virtue and private happiness, it would be vain to conjecture what she was meant, or rather what she was not meant, to symbolize. She is young and childish and uncultivated; a poet, or rather "a poem," a believer in fairies, a tamer of butterflies, and a proficient in the singularly tame and empty generalities which Lord Lytton used to mistake for the metaphysics of emotion. She was the ward of the artist, who had arranged her education to his fancy, and meant to marry her as soon as he was famous and she old enough. No doubt some moral lesson or æsthetic truth was adumbrated in Lily's preference of Kenelm over Melville, and when, loving the first, she promises to marry the other from gratitude and dies consequently of consumption before the wedding, this no doubt proves that to "find ideal truth in real life" it is necessary to have loved and lost, and since further it is ideal truth in bodily shape which the hero is supposed to love and lose, it follows that for the remainder of his days he must be content with real truth, *i.e.* Cecilia Travers, the exemplary young lady whose affections he had disparaged in the first volume under the influence of New Ideas in general and the views of the Rev. Decimus Roach on celibacy in particular. In saying that Lord Lytton kept pace with the times we only mean that he was not more out of harmony with the thought of the last decade than he had always been with the serious convictions of those amongst his contemporaries who had convictions. He knew approximately what was believed by different parties, but only at second hand, and without sufficient sympathy or insight to secure him against such occasional inconsistencies as this of making Kenelm reinforce the counsels of worldly wisdom learnt in literary London society by the spiritual precepts of an advanced Oxford Anglican on the "Approach to Angels." So industrious a workman ought to have known better than to confound Lord Bantam with Lothair. Similarly we are at a loss to recognise any known forms of "German æsthetic philosophy" in the cheerful morality which impresses Kenelm so much in the mouth of a country clergyman's wife as to mark the turning point in his conversion from the New Ideas, and especially from one of the most

highly esteemed amongst them, the "Not-worth-while Idea" which he had hitherto "made the basis of his philosophical system." The general conclusion at which he arrives is that it *is* worth while first to fall in love—either with the Ideal or the Real, as Providence may dispose—and secondly, and most emphatically, that it *is* worth while to become an enlightened Conservative member of the House of Commons. To complete the account of his "adventures and opinions" we should perhaps add that he valued churches because their bells, heard from outside, remind him that it is possible to believe "that Nature has a God and man has a life hereafter;" and that after having been introduced to us as "this strange man who surveyed the objects and pursuits of his fellows with a yearning desire to share them," murmuring to himself, "I cannot—I do not stand in this world; like a ghost I glide beside it and look on"—he is made in the last chapter to confess and resolve: "We must go through the romance of life before we clearly detect what is grand in its realities. I can no longer lament that I stand estranged from the objects and pursuits of my race. I have learned how much I have with them in common . . . My choice is made. Not that of deserter, that of soldier in the ranks."

After this it will scarcely be denied that Lord Lytton's mind preserved its youth to the last. Leaving out the disquisitions, *Kenelm Chillingly* would be a fair average story of fashionable life, rather slight in structure, but pleasantly written. But Lord Lytton's novels without the disquisitions would certainly be the play of *Hamlet* with Hamlet left out. The disquisitions are the hero and the hero is the author. It used to be said that the age of both varied together, and nominally perhaps this was true, but really time stood still, alike with the author and his characters, who, whether introduced first as of mature years, or supposed to pass from youth to middle age under our eyes, were in practice always the same ageless, colourless mouthpiece of the same sterile worship of the ideal; there was something touching in the earnest pertinacity which erected so many altars to the Unknown God, Genius, but since the God chose to remain unknown, a wiser worshipper would not have affected the mien of an initiated priest of his mysteries. This admixture of personal vanity made critics of the serious sort less indulgent to his failures than perhaps the laudable height of his aims gave him a right to expect; but on the other hand his popularity with the uncritical public was too considerable to make it easy to regard him as an object of pity—except for praise withheld, which could not honestly be given. Yet popularity so wide and sustained is a sign of some kind of power, and future historians of literature will be interested in the question what the power was that left its owner in such Egyptian darkness respecting its true nature and extent. It is generally admitted that his works might be so divided amongst half-a-dozen writers as to have furnished as many creditable third-rate reputations, and it is argued by some that several third-rate reputations together must be the equivalent of at least one second; and so far as the man himself is concerned this may be true, but it is not enough to secure even second-rate fame for his best works, while it is certainly hard that a writer who put so much of himself into his books should have most chance of being remembered if they are forgotten. Lord Lytton was an exceedingly clever writer, and it is perhaps within the bounds of possibility that under more favourable circumstances the same amount of cleverness might have produced a smaller quantity of better work; of ability unattached, merely literary cleverness, he possessed an abundant supply, and these gifts are scarcely distinguishable from original power of an inferior kind in ages possessing fixed traditions, classical models, and definite literary ideals. But in the

absence of any original, spontaneous impulse or creative power he could do nothing, in an age of literary individualism, but compile and invent with dexterity enough to deceive the unwary and himself. He believed that his place was amongst the foremost of contemporary writers, but he could not advance in any direction himself, much less lead others, until he had determined whither; and this question, which is scarcely settled in *Kendal Chillingly*, was certainly not settled in his earlier works.

The style of composition to which he was naturally most inclined seems to have been the old-fashioned florid romance, in which—to borrow his own criticism on Byron—sentiment is painted nearly as strongly as if it were passion, while the interest is sustained by an assortment of crimes, perils, and misfortunes of approved melodramatic types. In *Falkland* the tendency was unrestrained: in *Pelham* there is a subsidiary plot of the same order, though the success of the book was owing to the cleverness, then new, of its social satire. The motive in compositions of this school is generally a passion much too mysteriously profound to have its origin described within the compass of the work: it is usually something tragical connected with women—vengeance for some ancient wrong, a sacred vow, or something equally elastic and remote from ordinary experience. Even in *My Novel* and *What will he do with it?* the old leaven is nearly as active as in *Godolphin* or *Pelham*. In this respect Bulwer was always rather behind the taste of the ordinary educated public, but though he could not altogether reform, he tried to amend, especially after the warning conveyed in Thackeray's parody and Jeames' letter. What he wrote in this vein could not possibly have been written by a man of genius except in his teens, scarcely even by a man of talent unless he had mistaken his vocation; it was justly fatal to him with the critics, and was a serious weight on his general popularity.

It was probably a sense of something wanting to complete his success in the romance of incident, character, and passion that made Bulwer turn his attention to the capital to be made out of theories of art and morality. The person and adventures of the conventional hero were to derive profounder significance from association with a few windy propositions about the life of the soul and the influences of the universe; while the plot of the story was to be dignified by conveying some social doctrine or speculative opinion. In the first innovation, which has been referred to already, Bulwer to some extent followed a German tendency, which his writings have since helped to strengthen; but he was less sincere than his models and less ingenious than his imitators. When writers of the school of Tieck and Novalis turned romance into allegory the hidden meaning was really what the romance was written to convey; with Bulwer it was an after-thought, or at best the two were invented together; later Germans, like Auerbach—we are of course speaking of his novels, not his *Village Tales*—though they may not have a much clearer purpose than we have traced in *Kendal Chillingly*, still follow a different plan in trying to give artificial force to its expression. They contemplate a platitude till it swells, to the eye of sentiment, into an object of enthusiasm, where Bulwer used rather to take for granted a commonplace sentiment and then extract or append the nearest approach to a recondite reflection which occurred to him; but in any case it is a defect in a work of fiction for the author to have to appear as his own chorus. This Lord Lytton never felt, and since in 1851 he placed *Ernest Maltravers* and *Alice* in the first rank amongst his works, expressly on account of the moral—the hero, Genius, in love with Nature, bereaved of her presence, and finally re-united to her chastened and refined, &c.—we are

certainly justified in believing his title to immortality to be as slender as several allegorized melodramas can make it. But then Lord Lytton was not always exclusively himself. In 1845 he claimed to have “served as a guide to later and abler writers,” and though he had a considerable talent for free imitation, it is also true that he sometimes “followed before” public opinion, in directions which led less versatile and more earnest writers to assured distinction. Of his contemporaries Disraeli certainly owed him nothing, whereas the influence of *Vivian Grey* is plain in *Godolphin*, which owed its success to the fresh element of politics, though decidedly inferior to *Pelham*, for the author was far less master of the philosophy of party warfare and intrigue than of the laws of fashion and social success. But *Paul Clifford* and *Eugene Aram* were written respectively eight and six years before *Oliver Twist*, and inexplicable as their vogue seems to us now, they must have had some influence in bridging the interval that separated objective admiration for the gallant highwayman from the more searching sympathy that makes society responsible for his offences against itself. It is thus far from true that his reputation suffered through his advocacy of unpopular views; only as the views seemed rather to eke out his invention than to inspire or direct it they did not procure him a reflected popularity. When Dickens set to work to abolish beadles, or Thackeray to exterminate snobs, they were not only possessed with a conviction that those ends were supremely desirable, but they had also an unusually keen insight into the nature of beadles and snobs which enabled them to set a living picture of their undesirableness before their readers' imagination. But in *Night and Morning* for instance, which we are told was meant for an attack on respectable vice, the respectable villains differ in no way from those of more modest writers, whose villainy is subordinate to the exigencies of a plot intended merely to amuse an idle hour.

In historical romance Lord Lytton certainly distanced G. P. R. James and Ainsworth, but the day of the historical romance, as an independent form of art, was over as soon as it had served the purpose of re-awakening interest in the romance of history; if *The Last Days of Pompeii* and *Rienzi* were to live it would have to be for the sake of the fiction, not for the background of foundation in fact. In *The Caxtons*, in which he seemed to have struck out an entirely new line, there are traces of Thackeray's influence, besides the obvious imitation of Sterne; but he was too fertile a writer, or, at least, borrowed too little at a time and from too many quarters at once, for the charge of plagiarism to be worth pressing. The want of originality, which includes all his other shortcomings, compelled him to be always on the look-out for suggestions and materials ready digested for use, but his skill in following out and re-arranging these really left nothing to be desired. We have seen in *Kendal Chillingly* that he could take a hint from the school of muscular Christianity; in *The Parisians*, now appearing in *Blackwood*, it seems that he was not too proud to borrow from some recently published sketches of French society a new framework in which to set his moral dissertations upon art, pedigree, the stage, the vocation of woman, &c. Internal evidence, though the two works were published within a short time of each other, would also seem to suggest an obligation to Hawthorne for part of the conception of *Margrave* in *A Strange Story*, the mention of which brings us to the last, and not the least characteristic class of his writings—those in which he deals with the supernatural. It is intelligible enough that an author who was always seeking for stronger forces than such natural passions as he could apprehend or represent should have been attracted by the thought of mysterious agencies that could be

described by negatives, and might be explained away or not at will. He begins to trifle with the notion in *Falkland*; there are astrologers in several of his early works, and *Zanoni* is full of the Elixir of Life, which mingles in *A Strange Story* with mesmerism, theories of madness, and very random attempts to distinguish the separate lives of body, soul, and mind. As a short cut to sensational effects the trick is harmless enough, and when, as in Hawthorne, the imagination is satisfied by a kind of fantastic logic and coherency in the ideal creation—trick is hardly the word to use. But with Lord Lytton the magic was always mechanical, and the horrors those of an ordinary ghost story, to which the reader's nerves have to supply the chief contribution; while his sympathetic curiosity, always verging towards credulity, touching speculations of this kind, makes his judgment show to as little advantage as his imagination. In *The Coming Race*, which was pure fairy tale, his skill in taking hints from semi-scientific possibilities showed to greater advantage, and indeed but for the triviality of the political criticisms we should be inclined to call this his most original work. On the weightier matters of faith and philosophy its conclusions harmonize with those in which Kenelm seems intended to rest; for the probable discontent of mortals transported into Vrilja implies that what makes life on earth tolerable is its faults, which are ours.

If we seem thus far to have taken Lord Lytton's claims to consideration too much *au sérieux*, it can only be said that morality is a more serious matter than art, and that though he was certainly but an indifferent artist, he yet succeeded in luring so many thousand readers through so many pages of vapid moralization as to make his moral theories a matter of some consequence. The power by which he did so we conceive to have been the simple charm of commonplace. He was never weary of making sententious reflections of the kind that look profound to people who are not in the habit of reflecting for themselves; his sentences, naturally, were either true or false; if they were true, it was hard to prove that they were not worth stating so long as there were people who found them new and impressive; if they were false it seemed arrogant merely to say so without offering any reasons for the opinion, yet it would have been a waste of good mental energy, akin to that which we deplore in the author, to discuss each various occasion in which a small error takes the place of a smaller truth in discussions which are radically trivial and unproductive. The mind of man "works upon stuff." Lord Lytton was an indefatigable worker, and his mind was always active, but "stuff" was wanting, or rather it was there in abundant mass, but strangely thin and innutritious as to quality. After all, criticism of Lord Lytton is far rather criticism of the public taste which he always almost satisfied: his life and writings are at least valuable as illustrations of the truth that even when the two pursuits—of the Ideal and a tomb in Westminster Abbey—are followed with equal devotion by the same person, success in one is neither a consequence nor a guarantee of success in the other.

EDITH SIMCOX.

THE NUT-BROWN MAID.

To the Editor of the ACADEMY.

22nd April, 1873.

SIR,—Mr. Purves has overlooked a strong difficulty when he makes the last stanza a woman's, instead of the author's, as I made it in the Percy Folio; and that is, that the speaker prays God that "we [*i.e.* we men] may be comfortable" to women. No doubt Mr. Purves can get out of the difficulty by reading "ye" for "we"; but this would force the plain meaning of the lines to fit the fancy that because the stanza ends with "alone" it must be a woman's,

The dialogue ends with the Knight's promise to marry his Nutbrown Mayde (l. 348); and then in the concluding stanza the author sums up the moral of his charming tale, and speaks of himself and his fellow-men as "we."

F. J. FURNIVALL.

Notes and Intelligence.

The *Revue des deux Mondes* and the *Edinburgh Review* contain articles on the political romance *Um Scepter und Kronen*, which, though beneath criticism as a literary work, has excited much attention in Germany, owing to its subject, the war of Sadowa, and the calm audacity with which illustrious personages are brought upon the stage in it. The author, who uses the pseudonym Samarow, is reported to be one of the actors in the romance, Herr Meding, at that time Hanoverian *Regierungsrath*, whence his opportunities for acquiring information not generally accessible to private persons, as to how "under the influence of beer and Beethoven" (as the English reviewer puts it) "Prince Bismarck resolved to attack the Austrian Empire," and what astonishing nonsense defeated kings and emperors talk to their confidential advisers. The book is curious, because so far as there is any attempt to save decorum it consists, contrary to all former precedents, in making real personages do and say much that is imaginary, instead of masking indiscreet revelations by the use of fictitious names. The same (April) number of the *Edinburgh* contains a notice of Mr. Darwin's book on Expression, in which the weak sides of the weaker sectarians of Evolution are well pointed out, though the doctrine itself is partly undervalued and partly misunderstood.

In the *Allgemeine Zeitung* (Ap. 22, 23) there is an interesting account of the voluminous and unpublished Memoirs left by Christian v. Mannlich, director of the Munich Gallery, who died in 1822. The original MS. fills four large folios, and a copy taken by order of King Louis I. of Bavaria, and placed in the public library of Munich, is accessible to students. The author was born at Strasburg in 1740, spent much time in Paris, which accounts for the fact that his Memoirs are written in French and in a lively manner, proceeded to Rome in 1767, carrying with him Boucher's advice to study Albani and Guido, not Raphael, who in spite of his fame was *un peintre bien triste*, nor the terrible Michel Angelo; he afterwards studied under Mengs at Florence. Mixed up with diffuse private reminiscences are many anecdotes of literary, social, and even historical interest.

Karl Hillebrand writes to the same journal to state that he had been invited to examine the literary remains of the Countess Guiccioli, now in the possession of Count Gamba's family. They include a work on "Byron's residence in Italy," which contains unpublished letters and other contemporary memoranda, several autograph MSS. of Lord Byron's—of *Marino Falieri*, parts of *Don Juan*, the *Prophecy of Dante*, &c., and what is of more importance, an extensive correspondence belonging to the years 1820-1823, which however "is not very well suited for publication."

M. Saint Marc Girardin, whose death was announced last week, was equally active as a professor, a moderate liberal politician, and a *littérateur*. Besides frequent contributions to the *Revue des deux Mondes* and the *Journal des Débats*, his best known works are *Essais de littérature et de morale* (1844) and *La Fontaine et les fabulistes*, published in 1867. He succeeded Sainte Beuve as editor of the *Journal des Savants*.

At the Pultowa Observatory at St. Petersburg an old book (printed 1531) has been discovered, in which Copernicus, to whom it formerly belonged, had written marginal notes, partly astronomical, partly autobiographical, and placed temporarily at the disposal of the Copernicus Society of Thorn.

A new geographical journal, *Cosmos*, edited by Guido Cora, has been founded at Turin, and introduced with a preface by Dr. Petermann; the first number contains an article on Recent Expeditions to New Guinea, one entitled *Il Tangani-*

lia, bacino chiuso, and a third on the Russian possessions in North and Central Asia. Another new publication, *Storia dei viaggiatori italiani*, by Gaetano Branca, is intended to revive the memory of what Italy has already done in geographical discovery, and to stimulate the rising generation to deeds worthy of their ancestors.

Jerne of Armorica, the heroine of the new volume of the Quarterly Series, was, it seems, the daughter of Christian parents, but brought up to be a priestess of Ceridwen, and much impressed by Druidical metaphysics, which were surprisingly like those of Christianity. She had the good fortune to be captured by Clovis and placed in a convent at Soissons, whence she is carried off, still half converted, and after being rescued and betrayed a good deal finally converts her countrymen by being baptised after she has been stabbed by the archdruid to prevent her being rescued again. She appears to her lover as a white hart of the feminine gender to indicate a ford by which Clovis can make his way to engage the Arian Alaric. Her lover is killed in the battle, and Clovis and Saint Clotilde are crowned emperor and empress of Gaul at Tours after the victory. The author has taken a good deal of pains to collect antiquarian information from all sorts of authorities from Mallet to Gibbon and Villemarque; but the manners of the book are an odd medley of modern Roman Catholic Pietism and the imaginary chivalry of the Middle Ages; it would have been better to make the Franks speak the language of the Norse Sagas if it was impossible to construct a credible dialect for them out of the scanty indications given by Gregory of Tours.

The opening number of the new volume of the *Svensk Tidsskrift för Literatur, Politik och Ekonomi*, contains an interesting paper on the poet Olof von Dalin (1708-1763), the Swedish Boileau, who sang the praises of Queen Louisa Ulrika's court ladies, and wrote long didactic poems in alexandrines. The chief novelty in the criticism is the clever attempt to prove that though Dalin bowed before the French taste of the time, the real sources of his inspiration were the works of contemporary English writers. His famous literary journal, *Argus*, is shown to have been moulded on the plan of the "Spectator," and passages ingeniously imitative of Pope, Swift, Addison, and Steele are pointed out. Perhaps the most interesting idea is that Dalin's most famous poem, *Svenska Friheten*, "Swedish Liberty," was altogether inspired and suggested by a passage in the fourth book of Thomson's forgotten epic, "Liberty," a passage that celebrates Scandinavian prowess in the accepted manner of the age. In the remaining words of his essay the reviewer recapitulates the widely differing judgments which successive generations have passed upon Dalin's work, and exhorts the present one not to forget how much he did to build up a national literature in Sweden.

The question occurs to us, What would Dalin, or, to come a little nearer to our own times, what would Atterbom or Hammarösköld think of the literary condition of Sweden to-day? In all Scandinavia the *Svensk Tidsskrift* is the only first-rate magazine that is being published. What literary life there is in Sweden seems to have flitted from Stockholm and Upsala to Finland. It is to Helsingfors, it seems, that we are to look for scholarship and poetry! The *Svensk Tidsskrift* itself is far from being satisfactory; with the exception of the one paper we have cited, the whole number is heavy and dreary beyond expression.

In the April number of the *Preussische Jahrbücher* Theodor Lindner examines all the authorities for the legend of Charlemagne's entombment; after referring to the silence of all contemporary or well-informed writers as to anything unusual in the Emperor's burial, and to Thietmar's chronicle (1012) in which the opening of his grave by Otto I. is described without any miraculous adjuncts, he inclines to trace the origin of the myth which afterwards became current to the invention of Otte, Count of Comello, who is quoted in the chronicle of the Monastery of Novalese, in the valley of Susa (1048), as giving on his own authority, as an eye-witness, an account of what was found in the tomb when opened by Otto III. The only difficulty is that the same legend was known to a French chronicler, Adhèmar (1000), who might have got the story from Novalese, but there is no evidence to show that he did. The same journal contains a readable article on Mirabeau, by K. Mendelssohn Bartholdy, dealing chiefly with the romantic interest of his life and character.

Art and Archaeology.

Histoire de la Céramique. Par Albert Jacquemart. Paris. 1873.

THIS volume is perhaps the most comprehensive that has been yet written on the ceramic art. Starting with the axiom of a French writer that "the history of pottery is the history of humanity," M. Albert Jacquemart, after having first laid down the great divisions of pottery as established by Brogniart, proceeds to review in succession the fabrics of all the great civilizations of the universe, seeking rather to trace the historic influences or moral causes which have modified the ideas of the artists and the style of their works, than the improvements which science has made in their mode of fabrication.

In this philosophic study our learned author sets before his reader all in his subject that can interest the general as well as the special inquirer, through the course of ages to the present time. He begins with Egypt, where, contrary to the usual order of things, instead of a coarse pottery with rude attempts at ornament with zigzag lines or concentric circles, we find a porcelain of a beautiful turquoise blue, "scarcely rivalled after thirty centuries of human experience;" modelled as carefully as a jewel, and sometimes heightened with an enamel of fine workmanship. Of such are the objects found in the tomb of the Egyptian Queen Aah-Hotep, contemporary of Joseph, and our museums swarm with real ceramic masterpieces, representing the symbols of Egyptian worship, statuettes, lamps and vases ornamented with the symbolic lotus, or the scarabæus, with extended wings, emblem of the sun and immortality.

Hebrew art was a branch of the Egyptian, modified by the injunctions against images as leading to idolatry. A fragment now in the Louvre shows that the Hebrews used a siliceous earth enamelled with blue for cups, amphora, and lamps. Subjects from the vegetable kingdom formed the decoration of their vases, and the iconoclastic tendencies of this pastoral race were no doubt transmitted to the neighbouring nations, and rendered still narrower by the restrictions of Islamism, formed the basis of Arabian art and its exuberant floral ornament.

Passing next to the extreme East, for which M. Jacquemart shows a decided predilection, we have a most animated and interesting chapter upon China, its mixed theogonies, the one leading to all the extravagancies of superstition, the other purely philosophic; the government, language, and manners of the Chinese, their colours entirely symbolic, presenting a signification either political or religious. All these are intimately connected with the origin and development of their ceramic art, which can only be studied as associated with them.

Japan, as regards art, is superior to China, and among its products we find the great masterpieces of oriental ceramic art; but, as M. Jacquemart indignantly exclaims, since the opening of the country to European intercourse, we must confess that in point of art Japan no longer exists; it modifies its taste to conform it to ours, and sends us in place of its former charming productions, the inspirations of native genius, odious imitations of our manufactures—inevitable result of our contact with oriental nations. Where is this more strongly exemplified than in the modern shawls of Cashmere, all made under French teaching?

Assyria and Babylon with their enamelled tiles next follow; then Syria and the products of Damascus, the votive lamps of faïence and glass, and the rude "gey-cham" of Asia Minor. In the next chapter upon Persia, its pottery and porcelain, M. Jacquemart again launches forth on the history and manners of the country, the doctrines of Zoroaster, the good and evil genii Ormuzd and Ahriman, the fabulous animals, &c., all as in connection with ceramic works. His

ideas on Persian hard porcelain and on the products of India are not generally accepted.

The pottery of the Magreb or Barbary States, till lately so little known, is fully described; urns of almost classic form, vases with three handles, bearing a strong resemblance to those of the Hispano-Arabian, showing one common derivation. They are covered with a polychrome decoration, in which the tints are most harmoniously blended.

The unrivalled forms of Greek pottery have never been surpassed. To beauty of outline is added a severe simplicity of decoration, in which colour is made subservient to form, and an elegance of composition, raising to the highest standard of art the coarsest materials applied only to vulgar uses.

With the brilliant historic period of the Renaissance we have the enamelled pottery of Italy, the marvellous works of Luca della Robbia, and the fabrics of the hill cities of Romagna, their compositions the reflex of contemporary painting in Italy, the princes of each little court as much occupied in the manufacture as the artists themselves.

M. Jacquemart descants largely on the pottery of France, which country has created more decorative kinds of pottery than any other in Europe. Bernard Palissy, the ceramic hero of the sixteenth century, "the eloquent personification of the French taste of his period;" the mysterious products of Oiron, with the varied products of Rouen, Nevers, Moustiers, with Sèvres as the crowning work, show what ceramic successes France has achieved.

We will not follow M. Jacquemart to modern times, where each manufacture is fully described. The whole is most carefully and conscientiously written. The work is profusely illustrated with woodcuts, and twelve admirable aquafortis engravings by M. Jules Jacquemart. Father and son seem animated with the same feeling for art, the draughtsman interpreting the thoughts of the writer, each illustrating the other.

M. Jacquemart's ideas on some points may be fanciful, but they will always command attention as the result of many years' study of the subject; and containing so extensive a history of all ages and all countries, his book forms a complete grammar of the potter's art. F. PALLISER.

THE CASTELLANI COLLECTION.

By the arrival within the last few days of four very precious painted vases the final charm would appear to have been added to that series of artistic remains collected by Signor Castellani here and there among the sites of ancient Greek, Etruscan, and Roman civilization, and now deposited in the British Museum. As the collection now stands, therefore, so must it be judged, leaving only a narrow margin for what is still in Rome, and remembering that whereas it now constitutes a most choice epitome of ancient art, it would necessarily, if acquired for the British Museum, be distributed, and each particular object called upon to sustain a severe comparison. In this event, no doubt, some would suffer and many gain greatly. On the other hand, there is a class of monuments which, by combining historical with artistic importance, admit of no comparison, every addition of this kind to a public institution being a positive and direct gain to knowledge. Of this nature is one of the recent arrivals, a vase on which is painted the scene at the institution of the Eleusinian Mysteries, recalling vividly the Homeric Hymn to Demeter. The names of the persons engaged in the ceremony are inscribed beside each. The central place is occupied by *Tripptolemos* (so written) seated in the winged car presented to him on the occasion by Demeter, with the injunction to travel through all lands for the purpose of teaching mankind to cultivate grain. Behind him stands *Demetre* holding a torch and ears of wheat. Before him stands Persephone, here called *Pherophatta*—a more ancient form of the name, from which her sanctuary in Athens was styled *Pherrephattion*. Behind her is a female figure, named *Eleusis*, a personification of the locality, and behind her again is seated *Eumolpos*, who was said to have been the first Hierophant at Eleusis, and in

whose family that office always remained. On the other side of the vase are the deities *Zeus*, *Poseidon*, *Anphitrite*, and *Dionysos*. Another object of importance in the study of ancient religion is the bronze tablet, known as the *tavola d'Agnone*, from the place where it was found near Bovianum, with a long inscription in the Oscan language ordaining, according to the interpretation of Mommsen (*Die Unteritalische Dialekte*, p. 128), festival days for the various Samnite deities whose names even in many cases would without this tablet be unknown. For the study of the Oscan language it has another and a very considerable importance.

For the variety of interest which it awakens there is, however, no monument in the collection so conspicuous as the terracotta sarcophagus which once under the ground of the ancient Caere contained the body of *Tannia Unatia*, the daughter or it may be the wife of *Velius Matinius*. In either case she must not have been over four and a half feet high. Reclining on a couch formed by the lid is an old man, whose nude body and limbs have given the sculptor every opportunity of expressing the spareness and wasting of age. By his side is a lady with whom he is engaged in lively conversation. To judge from her dress and ornaments she must have been a person of station. The four sides of the sarcophagus are sculptured with figures in low flat relief, the subject on the front being a combat which, if it be mythical, may be described as that between Achilles and Memnon. The hero to whom the encounter is fatal would be Memnon; while the women who stand looking on from either side would be, as frequently on vases, the mothers of the two heroes, Thetis and Eos, each with a female attendant. Who the two men may be who also look on as partizans we do not know; but there can be no doubt that the graceful winged figures at either extremity of the scene represent the Fates or souls of the two combatants, such beings as those which Zeus, to be impartial when Thetis and Eos implored him each to save her son's life, placed in his balance, holding it while the combat lasted. The soul of Achilles trips from a portal lightly on the scene, but that of Memnon bounds away. On the head of the sarcophagus is sorrow and wailing on the part of two couples who sit facing each other leaning their heads on their hands. On the foot are two warriors, probably again Achilles and Memnon, taking leave of Thetis and Eos, each with her female companion. On the back are a man and wife reclining on a couch, surrounded by female attendants and all the apparatus of a feast.

From an artistic point of view these reliefs present a striking contrast to the figures on the lid in this respect that while in the former formality and a certain manner of gracefulness are supreme, in the latter the utmost devotion appears to have been paid to the production of truthful copies from nature, however ungainly they might be. In the reliefs the female figures compare very well with some that are to be found on the early vases, and particularly with the figure of Athene on the Burgon Panathenaic vase, in which the same shortness and breadth, precisely the same drapery with its broad borders, the same facial angles, and the same smallness of head are recognisable. The male figures are also of this short, thick type for which the name of Old Doric has been suggested by their resemblance in this respect to the columns of the early Doric architecture. The artist has had to render a mythical subject and he treats it in the traditional manner in which he finds it handed down. But in the figures in the round on the lid his task has been one of portraiture, in which he has been scrupulous to be exact. The fact of his extraordinary success, however, requires some explanation. It may be that the art of sculpture in relief had from long practice before his time come to be bound down to certain traditions of style, while sculpture in the round is to be regarded as then possessed of all the vigour and force of a new and youthful art. In support of this explanation we might point on the one hand to the frequent mannerisms of the later Assyrian reliefs as compared with the earlier, and on the other hand to the extreme scarcity and rudeness of Assyrian sculptures in the round as a proof that the latter phase of art followed the former at a long distance. Similarly in the history of Greek art we find sculpture in the round coming first into practice, and then in some cases as portraiture, about the seventh century B.C., while sculpture in relief is known to have been practised by the Greeks centuries before that date.

On the front of the sarcophagus is inscribed :—

(1)

41IKIZ4VT3[1]333MM4MM334V331M

(2)

AT4MYI4M14M14V334M40

That is, reading from right to left, (1) *Mi Vela Vesnas me vepe Tursi kipa*, and (2) *Thania Velai Matinai Unata*. The letters are obviously early Greek, and, so far as they go, closely resemble the Greek alphabet found written on a vase from Caere now in the Museum Gregorianum in Rome. The date is not determinable, but so much may be gathered from the presence of two forms of *s*, that the inscription belongs to a period when the Greek alphabet had not yet dismissed the Phœnician element of a double form of sibilant. With regard to the interpretation this is not a time to be venturesome when any day may bring a book of Corssen's containing the promised revelation on the language or languages in use in Etruria. There is, however, in the Campana collection of the Louvre an Etruscan fibula of gold found at Clusium (Chiusi) and bearing an inscription in which the same formula, the same forms of letters, and for the greater part the same names occur. If it has been rightly interpreted (*Bulletino d. Inst. Arch. Rom.* 1851, p. 46) there will be no difficulty in reading our inscription as a form of Greek *eimi Feliou Finniou. me kēpoiei Tuskos kēpīos*; the fibula was the work of this same Tuscan artist Cippius and belonged to one of the family of Velius Vinnius.

Among the objects of a peculiarly Italian character in the Castellani collection are four terracotta figures of actors found in Campania and representing the Pappus or Pantaloon, the Maccus or Glutton, and the Bucco or Clown of the old *fabulae Atellanæ* which were introduced into Rome from Campania in the year 450 A.U.C., and still exist in the Italian Punchinello. The fourth character is a thief who protests that he has not stolen a purse, the corner of which he will be dismayed to find is visible under his mantle.

Turning now to the monuments the merits of which rest on their beauty alone, it is difficult to know where to begin; whether to approach first that singularly monumental bronze head of Aphrodite which looks so fair and has the illumination in its features which transcends all the expression of mortals, or whether to take the marble head of Hera, chaste and refined to the borders of severity, as became the somewhat cold but still the noblest of goddesses. Her lips have been spoiled of their curving lines by polishing, but traces enough remain to show that they must almost have rivalled in delicacy those of the bronze head. Her massive chin, like the chins on the coins of Sicily, reminds us that the marble was found at Agrigentum. But instead of the Sicilian nose, which on the early coins is remarkably short, and even in the best is by no means too long, the nose of Hera is unusually prolonged and lends a peculiarly restrained or rather chastened expression to the face. Then again there is the bronze relief of a young hero from Tarentum, which has been compared with the Theseus of the Parthenon for the simple grandeur of its forms. But the face is too animated for Pheidias, and the sense of physical strength in the neck and head too pronounced. *Gloria Lysippi est animosa effingere signa* (Propert. iii. 7, 9), and were it not that we have been led to expect nothing so noble from Lysippos we should trace this figure to his school, which must have flourished greatly in Tarentum. We must pass over the most graceful of bronze strigils, the rhyton from wealthy Capua, and many other objects tempting by their beauty or their historical importance. A. J. MURRAY.

PUBLIC WORKS AND ANTIQUITIES IN ROME.

THE manner in which authorities pursue antiquarian undertakings at present in Rome is not less contrasted with former proceedings in that range than is the constitutional monarchy itself with the theocracy which has yielded place to it. Between two and three years have passed since that great change; yet still are the older quarters of this city left in their old conditions, with narrow, gloomy streets, ill-paved and uncleanly as before, their dismal palazzi and huge convents looking as dull and

dilapidated as ever. But when we quit the lower for the higher regions we find on the heights of the Quirinal and Esquiline Hills the new Rome rapidly springing up, with handsome rectilinear and symmetric streets, large and imposing mansions, a general air of cheerfulness and superior civilization—the genius of the nineteenth century, in fact, confronting the mediæval and sixteenth century metropolis so little improved during the ages of pontifical dominion—though (it is fair to add) much embellished under Pius IX. At some spots the scene, in the transitional circumstances, is curiously picturesque. Where once were in view only solitary fields, neglected gardens, squalid cottages, with here and there a grey old villa amidst enclosures and ilex-trees, the surroundings all rural though actually within the civic walls and towered gateways, the eye now perceives on every side the signs and consequences of this wide-spreading innovation—the activities of the mason and the builder breaking up the ground and intersecting it with long lines of foundation-walls, or passes where walls are to arise, or habitations near to completeness: the residences of faded aristocracy or once wealthy prelates are dragged into view by the throwing down of their enclosures or uprooting of their gardens—the metamorphosis thus effected around them being itself an apt symbol of the decline of the Past before the ascendant Present in Rome. On those higher grounds of the classic hills almost all available spaces have been purchased by building companies; and by the beginning of last winter 2,000 new houses were commenced. Though the law for suppressing monasteries and convents has not yet been enforced here, almost all such establishments are now appropriated in part for secular uses—for the school, the barracks, or the ministerial office; the great “Collegio Romano” of the Jesuits contains the Gymnasium and Lyceum, under government control; the Minerva Convent of the Dominicans, where the Inquisition held its sessions, serves for political purposes; and cavalry soldiers intrude upon the ascetic solitude of the Carthusians in the cloisters built by Michelangelo among the ruins of Diocletian's Thermae. In January last appeared an edict for the expropriation of sixteen convents or other monastic properties at one blow. The newly appointed Commission of Antiquities, to which the Government assigned a subvention of 300,000 francs per annum, comprises six assessors; and an engineer (Signor Lanciani, himself a learned archæologist) is now engaged in the service of the municipality to report to those magistrates once a week all things found in the range of the antique. Nothing of this character can be sold or removed till after such report, and after sanction obtained for so disposing of such objects. The earliest adopted projects of the Commission were: the uniting of all grounds on the Palatine Hill in a single estate for the furtherance of the *scavi* over the entire extent; the reducing of the Forum to its ancient level, and the opening of the (for the most part buried) Via Sacra as far as the Coliseum; the purchase and working of the Forum of Augustus; the complete disencumbering of the Antonine Thermae, and reduction to their ancient level of the halls and palestra throughout those vast ruins; the formation of a museum, to contain all the more valuable specimens of architecture in fragmentary state located in the long deserted chambers of the Tabularium, above whose ancient structures stands the modern Capitoline Palace. External to the city the principal undertakings resolved on, and soon commenced, were the purchase of the ruins of the Tiburtine Villa of Hadrian for *scavi* over their whole extent; and the resuming of the works at Ostia, commenced in 1855 by the late Government.

Among less important, though in some instances noteworthy, discoveries are those of numerous mansions, more or less decorated with painted walls, mosaic pavements, &c. Such have been brought to light amidst the earth-heaps accumulated against the agger of Servius Tullius, on the premises of the central railway station, together with many courses of massive stone-work, which must have fenced the earth-works of that agger on both sides. Similar remains brought to view by the cutting of the agger, unfortunately necessitated for the building of a great ministerial palazzo near the Porta Pia, have been swept away; amidst heaped up soil and new foundation-walls in a once solitary valley between the Viminal and Esquiline, overlooked by the cupolas and campanile, grandly conspicuous on the latter hill-summit, of S. Maria Maggiore, the remains of a mansion lately laid open attest the most aristocratic character; but the painted walls, the mosaic pavements, the

open court with a marble-encrusted fountain at one side, have all been again consigned to earth and oblivion through the utilitarian demands of proprietors or builders for the site occupied. There was something affecting in this brief glimpse of olden splendour so soon to be again buried as during ages past. So many ruins of more or less conspicuous mansions have been discovered on the grounds near the eastern line of walls where the Quirinal, Esquiline, and Viminal gradually converge to a wide plateau, that we may infer the anciently aristocratic character of this entire region. Here is supposed to have stood (near the railway station) the villa of Mæcenas, within which demesne the ashes of Horace had sepulture (would that the spot were recognisable!)—allowed an honourable tomb on the estate of his beneficent friend. Most of the ancient houses, lately found in long-buried ruin, seem of about the period of Hadrian or the Antonine Emperors. Some partition walls with paintings in good style—Europa carried away by the bull, and a voluptuous love scene, &c.—within a private estate near that part of the Thermæ of Titus called “Sette Sale,” must pertain to the buildings of the baths founded by that emperor and added to by Trajan on the Esquiline. Next to the precious fragments of marble architecture on the Palatine and Forum, the finest relic of the antique in that class lately found is a colossal and exquisitely wrought pediment with frieze and Corinthian mouldings, the brackets supporting eagles which grasp thunderbolts in their talons, like those in the details of the Portico of Octavius; this new treasure-trove being laid at little depth beneath the surface of grounds near the side platform of the Prætorian Camp, still surrounded on three sides by its old fortifications.

More valuable art-works, sculptures, are dug up from time to time. Among the latter I may mention a finely-draped female figure (supposed a Flora, but without attributes) discovered on the spot where, on the 25th January last, was laid with solemnity the first stone for a Protestant Episcopalian church, designed by Mr. Street, for worshippers from the United States. Among busts of superior execution a head of Juno, a colossal portrait of Titus, and a fine colossal head of Bacchus stand out from the multitude. A seated female statue, headless and armless (probably a goddess—perhaps Cybele), is the most noticeable of recently found sculptures in the Palatine. The most precious art-works lately added to the Capitoline Museum are two small statues dug up within the great public cemetery at the extramural S. Lorenzo: a youthful Hercules, with laughing expression and a boyish delicacy of form very unlike the more familiar types of that god, who here holds three apples (from the Hesperides’ garden) in his hand; also a Cybele seated on a throne in a kind of sedecula, found entire, and with a curious dedication on the front-cornice:—“Terræ Matri S. A. Hortensius Cerdæ Conservatrici meæ. D. D.” In this museum is also placed the singular monument, with a statuette-relief, to the literary youth Quintus Sulpicius Maximus, who died at the age of eleven, having won a prize for Greek poetry in public competition,—the memorial of him, with his poem in Greek chiselled beneath his effigy, having been immured in one of the round towers of the Salarian Gate, destroyed (I am sorry to say) by the new authorities for the erecting of a new “Porta Vittorio Emanuele” on the same site.

Other projects, not all carried out, which promise well for art interests are the new museum on the Capitol, that already open for local antiquities at Ostia, some (private) on the grounds purchased for building near the beautiful domed edifice mis-called “Minerva Medica Temple.”

Two of the relief representations of the sacrifice of Mithras (the god piercing with his dagger the allegoric bull), several examples of which mystic subject are seen in Roman museums, have been lately brought to light, one from the pavement of an old house in Trastevere, the other from a cavern (no doubt destined for the worship of that Persian Sun-god) in the Capitoline Hill—this last, we may conclude, no other than the sculpture seen in a subterranean recess below that hill, and reported with wonder by Flaminio Vacca in the sixteenth century. Those Mithraic reliefs, highly interesting for symbolism, are of the rude and feeble execution which indicates a late period, the decline of art, and also the long, lingering life of that Oriental religion. Both are now placed in the Palazzo dei Conservatori on the Capitol. In a hall of the same palace has been formed a provisional museum, containing a great variety of objects, artistic and

for household or other uses, some beautiful, and all more or less curious; the majority found on the Esquiline Hill and in or near the Prætorian Camp, all the architectural fragments (among them some splendid specimens of variegated breccia, with agate embedded in the many-hued component masses) will be transferred to the collection in the Tabularium; the sculptures to the Capitoline Museum in the opposite building, or to some other yet unchosen locality. In the best among sculptures now on view, as they are provisionally placed, we observe the Romano-Greek characteristics, vigour, truthfulness, and a noble simplicity. Well are these qualities displayed in these life-size statues of athletes about to engage in contest, all nude and of finely developed muscular forms, powerful without any coarseness; the heads expressive, even beautiful. A statuette of Venus rising from the sea, or the bath, and wringing the water from her long hair is most graceful. A head of a youthful faun, crowned with pine cones, has visible traces of colour, vivid red, &c., and in its half-savage character a certain poetic wildness. An immense number of terracotta lamps and decorative details are mixed with iron and bronze objects: some chains and manacles, for refractory Prætorians perhaps, among those metallic specimens. The numismatist will be delighted by a numerous assortment of copper and silver medals; the student of historic monuments by a variety of epigraphs, some interesting in their titles and import—one with the indication of an officer, the “Præfectus Equitum,” known to have been maintained not longer than from the reign of Augustus to that of Claudius: “P. Numicius Picæ Cæsiano Præf. Equitum VI. vir Pro Pi. Provinciae Asiæ Tri. Pi. Provincia Asia.”

In another sphere, private enterprise, I have to mention some sarcophagi with good reliefs, of the third century, as appears probable, found in a mausoleum, long unopened, on an estate near the Appian Gate. In the range of Christian archæology I am glad to report that the Chev. de Rossi and his assistants are not interfered with by the new authorities, those gentlemen continuing connected with the ecclesiastical and dependent on the Pope. The only considerable works in catacombs since the political change are those still progressing, though slowly and with but few hands, in the cemetery called after S. Calixtus, the burial-place of the popes during the second century; also in that (I prefer “cemetery” to the mediæval term “catacomb”) called after Prætextatus, the representative of a patrician family, and in which latter hypogæa are seen the tombs of martyrs who suffered in the second century. A most interesting and extensive range of the subterranean corridors and chapels belonging to the S. Agnes Cemetery has been opened, and is still being worked, by the monks of the monastery at the extramural church dedicated to that saint.

But more memorable than all the discoveries and art-objects I have alluded to are those secured through the labours, long carried out, at those pre-eminently classical and promising centres, the Forum and the Palatine Hill. C. I. HEMANS.

(To be continued.)

SOCIETY OF FRENCH ARTISTS.

THE sixth exhibition of the Society of French Artists, now open at 168, New Bond-street, is distinguished from former exhibitions by the great picture by Eugène Delacroix of the “Death of Sardanapalus” which occupies nearly the whole of one of the walls of the small gallery. The apparition of such a picture as this in a modern gallery where we are only accustomed to find faithful landscapes and sentimental domestic genre subjects is perfectly startling. It is like an opium dream in its evil beauty and splendid horror. Delacroix, we are told, considered this work “the greatest feather in his cap—the triumph of orientalism over the Spartan daubs of the David school.” His contemporaries, however, did not agree with him, and the “Death of Sardanapalus” excited much adverse criticism when it was first exhibited in the Salon of 1827. Only recently has a more favourable opinion prevailed. The estimation in which it is now held is sufficiently proved by its having fetched 96,000 frs. at the recent sale of the Wilson collection in Paris.

At first the confused detail of the terrible scene represented is bewildering, but the eye soon recognises the masterly drawing and still more masterly colouring that the painter has brought to his work. The composition of the picture, both as regards

the grouping of the struggling masses of men, women, and horses, and the disposal of the lights and shades, is almost worthy of Rubens. Few other masters could have commanded such subtly gradated and complex flesh tints, or have poured out such lavish magnificence of colour. But the faults of Rubens are in a still greater degree the faults of Delacroix. With every shade of colour we look in vain for any shade of emotion in this "Death of Sardanapalus." The dying monarch himself is insignificant, and the actors in the wild massacre going on around him are actuated by no passion save an uniform fury. Byron's terrible conception remains therefore unrealized, for the painter has not understood the "fiery workings" of the poet's heart, but has only represented the material image called up by his verse. Still, when criticism is exhausted this "deed" of Delacroix's will remain like that of Sardanapalus—

"A problem few dare imitate and none despise."

Turning from this picture to the peaceful landscapes that form the greater part of the remainder of the exhibition seems like coming out of a theatre into quiet country lanes; Jules Dupré leads us beside a still river, Marie Collart takes us into an autumn forest through which the light gleams from a threatening evening sky, G. Courbet places us with a man and a girl in a boat on a dark pond in Franche Comté, and Corot brings us to many pleasant places, all of which however, when looked at too near, seem undefined and enveloped in mist. This peculiarity disappears to a great extent when the picture is seen from a distance. The painter has evidently had regard to the position his pictures were likely to occupy on the walls of rooms, and has wished them to be seen to their best advantage without giving people the trouble of going up to examine them.

One really fine landscape appears among the many pleasant ones in this exhibition. "River Pastures," by Jules Dupré, No. 88, is lifted far above the commonplace by its skilful disposition of light and shade. The little pond in front, by which the barely sketched horses are standing, is made to reveal its secret in the strong light thrown on it by the strangely lurid sky. The whole scene, in fact, is rendered poetical in the same way as Rembrandt would have made it so, by a true artistic perception of the mysteries of light and shade. This picture hangs in the upper room of the exhibition, where also may be seen several of J. A. M. Whistler's daring experiments in colours. In the "Golden Screen—Harmony, in Purple and Gold," No. 109, he seems to have emulated the painting on the Japanese screen that the lady holds in her hand. M. M. HEATON.

NOTES ON ART.

The private picture collections of France have never been described and criticised as our English collections have been by Mrs. Jameson in her excellent *Handbook to the Private Galleries of Art*, and by Dr. Waagen in his *Treasures of Art in Great Britain*, but the *Gazette des Beaux-Arts* is doing its best to remedy this omission in the articles descriptive of various important private galleries that have recently appeared in its pages. The collections of M. Thiers, M. le Comte Duchâtel, M. Maurice Cottier, M. le Comte Pourtales, M. de Morny, M. Delessert, M. M. Pereire, M. le Marquis de la Rocheb., M. Papin, and M. Laurent Richard, collections now for the most part dispersed by the auctioneer, have already been described, and in the present number we find an interesting account of the "Galerie de M. Gustave Rothan." The Rothan collection has only recently been formed. According to M. Paul Mantz, its critic, it has been formed with much judgment. It is rich in works of the Dutch school, especially in those of one of its earlier masters, the jovial veteran Frans Hals. The article is illustrated by an etching from a portrait by him called "La femme au gant" that is very like a Rembrandt; indeed Frans Hals, more perhaps than any other painter, may be considered the master of Rembrandt. Nicolas Maas, Rembrandt's greatest pupil, is also well represented, but the portrait assigned to Rembrandt himself is "fortement contesté;" some critics believe it to be by Reynolds. Adrian Van Ostade, C. Netscher, Jan Steen, the dreary Palamedes, Van Goyen, Lingelbach, W. Van der Velde, Ruysdael, and Hondekoeter are other Dutch masters whose names we meet with in the Rothan collection. It is not stated whether this collection is doomed to follow those already mentioned to the Hôtel Drouot.

Among the many parts that M. Thiers has played in his time has been that of art critic. The *Gazette des Beaux-Arts* quotes a long passage from an article in *La Revue européenne* on *David et son École*, written by M. Thiers in 1824, in which he expresses his love of the ideal and the beautiful in art, *le vrai beau* and *le grand beau*.

On the 6th of April the anniversary of Raphael's birth and death was celebrated at Urbino. Mr. Morris Moore, in compliance with the desire of the president of the Raphael Academy, gave a lecture on Raphael and his works, and afterwards finding that 5,000 lire were still wanting to complete the sum necessary for the purchase of the house where Raphael was born, he kindly offered to contribute this amount. At the banquet that followed the Mayor conferred on Mr. Moore the rights of an honorary citizen of Urbino, and bestowed on him also the privilege of always having a room at his disposal in the Raphael-house.

The death is announced of Pierre-Antoine Labouchère, a French painter of some note. M. Labouchère was a pupil of Paul Delaroche, and is principally known by his subjects from Protestant history, especially by his numerous paintings representing episodes in the life of Luther.

The empty spaces in the Gallery of the Luxembourg caused by the number of paintings that have been sent to the Vienna Exhibition have been partially filled up by several works that have been laid aside for many years. Among these we find a *Temptation of Christ*, by Ary Scheffer, a man's portrait, by Gigoux, *le Bien et le Mal*, by Victor Orsel, and a *Relais de diligence en Normandie*, painted in 1831, by Charles de la Berge.

The great Laurent Richard collection—a collection "consecrated exclusively to the glorification of the modern French school"—was sold on the 7th inst. at the Hôtel Drouot. This sale has been the talk of the artistic world for some time past, and it was, as might be expected, very largely attended. "A tumultuous crowd," says a French paper, "followed the experts." We have in a previous number given some account of the principal pictures of this collection. It only remains to add the prices they realized—prices that go far to prove that their value was not over-estimated by connoisseurs. In almost all cases the painters were represented by some of their best works.

FRANCS.

Corot.— <i>Nymphes et Faunes</i>	23,000
" <i>Danses de Nymphes</i>	14,000
" <i>Souvenir de Marissel</i>	15,100
E. Delacroix.— <i>Mède</i>	59,000
" <i>Christ au tombeau</i>	29,000
" <i>St. Sébastien secouru</i>	31,500
" <i>Christ en croix</i>	29,000
" <i>Lizre et Lapin</i>	31,050
Diaz.— <i>Descente de bohémiens</i>	15,000
" <i>Une Eclaircie</i>	25,700
J. Dupré.— <i>La Mare aux Chênes</i>	38,000
" <i>Le Pont</i>	28,500
" <i>Les Landes</i>	30,000
" <i>La Rivière</i>	36,000
" <i>La Barque</i>	19,500
" <i>L'Étang</i>	18,000
" <i>Marine</i>	19,000
" <i>Arbres au bord de l'eau</i>	17,050
" <i>Le Petit pont</i>	12,800
Fromentin.— <i>La Fantasia</i>	40,500
Marilhat.— <i>L'Enfant prodigue</i>	30,500
Meissonier.— <i>Le Joueur de guitare</i>	37,000
" <i>Soldat sous Louis XIII.</i>	31,200
Millet.— <i>La Lampe</i>	38,500
Th. Rousseau.— <i>Le Givre</i>	60,100
" <i>Le vieux Dormoir</i>	36,000
" <i>Les Bûcheronnes</i>	36,000
" <i>Lisière de Clairbois</i>	33,500
" <i>Métairie sur l'Oise</i>	38,200
" <i>Cours d'eau (Sologne)</i>	40,000
" <i>L'Automne (Fontainebleau)</i>	37,000
" <i>Plaine et Marais</i>	30,000
" <i>Landes boisées (Sologne)</i>	17,200

Troyon.— <i>Le Gul</i>	62.000 fr.
„ <i>Berger et Moutons</i>	41.700 „
„ <i>Vaches, soleil couchant</i>	27.050 „
„ <i>Retour du troupeau</i>	25.500 „
„ <i>Animaux à l'ombre</i>	19.200 „

We have to regret the death of Mr. William Davis, the landscape painter. His pictures were for the most part small, and have scarcely ever been favourably seen at the exhibitions; but that called "Harrowing" was a noted and much admired example of his works at the International Exhibition in 1862.

The activity which is manifested at Berlin is also apparent at Vienna. If the plans of the Austrian Government are carried out we shall have a new museum to replace that of the Belvedere, in which there will be room not only for the grand collection at present crowded into a small and inconvenient space, but also for a host of canvasses and panels, many of which are now lying in magazines and even in lumber rooms of imperial country houses. The new collections will require new catalogues, and these it is the first aim of the director, Professor Engerth, to obtain. We may hope that the importance of giving to works of art their genuine names will be recognised. It is quite necessary that the new catalogues, both at Vienna and Berlin, should tell the public the truth.

New Publications.

- BELLERMANN, H. *Die Grösse der musikalischen Intervalle als Grundlage der Harmonie.* Berlin: Springer.
- BOCCACE, Jean, *Sixième et septième journées du Dédaméron de.* (Edition Jouaust.) Paris: Lib. des bibliophiles.
- CHOUQUET, G. *Histoire de la musique dramatique en France depuis ses origines jusqu'à nos jours.* Paris: Didot.
- GEHARDT, W. *Die Komposition der Gemälde d. Polygnot in der Lesche zu Delphi.* Göttingen: Peppmüller.
- HAMERTON, P. G. *The Intellectual Life.* Macmillan.
- HAUPTMANN, A. *Moderne ornamentale Werke der italienischen Renaissance.* Dresden: Gilbers.
- JECKIN, D. *Die Burgen und Schlösser in "alt fry Rätia."* Chur: Gsell.
- LECOY DE LA MARCHE, A. *Extraits des comptes et m^émoriaux du roi René, pour servir à l'histoire des arts au xv^e siècle, publiés d'après les originaux des Archives nationales.* Paris: Picard.
- PRIAULX, O. de B. *The Indian Travels of Apollonius of Tyana.* Quaritch.
- ROSENBERG, ADOLF. *Herr Professor Boetticher als Archäolog. Ein Beitrag zur Geschichte der Berliner Archäologie.* Berlin: Bornträger.
- SULIVAN, Capt. G. L. *Dhow Chasing in Zanzibar Waters and on the Eastern Coast of Africa. A Narrative of Five Years' Experiences in the Suppression of the Slave Trade.* Low.
- TAUREL, C. E. *L'art chrétien en Hollande et en Flandre.* Brüssel: Muquardt.

Theology.

The Scientific Bases of Belief. J. J. Murphy. Macmillan and Co. 1873.

THERE is a book by Harris, a meritorious though neglected thinker of the last century, by whom Boswell fructified much, entitled *Philosophical Arrangements*, the title of which indicates exactly the kind of speculative power which Mr. Murphy displays. He is hardly what is called "a suggestive thinker," that is to say, he does not deal in brilliant aphorisms which opponents can isolate and accept; he certainly is not a powerful reasoner, he is apt to think he can turn probabilities into certainties by a series of cross references; and, though this is a less defect, he trusts by preference to the cumulative force of many weak presumptions rather than to one solid chain of argument. Nor can it be said that he is a great master of exposition, and understands how to marshal a great body of facts impressively. And yet it must be admitted that he has thought out a clear, coherent system which answers most of the questions which we have been in the habit of asking; that the answers are never in flagrant contradiction with knowledge, and are even

sufficiently supported by a few important facts and a great many plausible analogies to produce a strong impression on an ingenuous and attentive reader that there must be something in it all.

Readers whose habits of thought are too fixed to yield to anything short of scientific demonstration will be inclined to maintain that a method which combines the physics of *Habit and Intelligence*, a work which has many curious points of contact with Hartmann and Schopenhauer, and the transcendental Christianity of Erskine of Linlathen, proves nothing because it is capable of proving anything. But after all this is only a presumption, and those who can resist it will find the book sufficiently ingenious to repay them.

The writer's object is to show that spiritual truth may be made to rest upon scientific truth in the same way that the higher sciences rest upon the lower without being developed out of them; e.g., biology presupposes chemistry, but it is impossible to construct biology from the data of chemistry or even to explain all biological laws as cases of chemical laws. His main positions are as follows: Knowledge is valuable both as a guide in action and still more as an aid to the formation of character. Knowledge of the former kind can only be obtained by inductive science starting from data of observation (and as for this purpose all other methods are sterile Comte was so far right in his condemnation of metaphysics); but when we have attained all that is possible in this direction we need to interpret and realize our knowledge (Mr. Murphy does not recall the significant fact that Comte's last work was a subjective synthesis), and this is done by metaphysical science starting from data of consciousness.

He has an unusually firm grasp of the position that "there is no ground for believing matter and mind or spirit to differ in their essence: and that while inductive science reveals a world of matter whereof mind is one of the functions, metaphysics reveals a world of spirit whereof matter is one of the functions, so that we recognize the deepest realities of the universe as not material, but spiritual." At first sight this position scarcely seems to go beyond what Professor Huxley for instance would accept, though perhaps he might think the truth of the last line insufficiently established by deductions from the different aspects of the fact that our only intuition of force is furnished by our own volitions. But there is a more important difference: so far as Professor Huxley would admit the generalization it stands for him at the end of science; for Mr. Murphy it is always in the foreground as the starting-point of philosophy, lighting up such conceptions as the laws of thought, the ground of the moral sense in uncreated law, our faith in the uniformity of nature, and the intelligence shown in the adaptation of organic nature to inorganic. This intelligence Mr. Murphy does not believe to be supreme, but since it began to exist in time it must derive from an Intelligence which is eternal. Here we come to one of the most disputable points of the system. The author is very much impressed by the facts which prove that the solar system cannot always have existed under its present conditions and tell in favour of the nebular hypothesis; of course these facts are also a presumption in favour of the hypothesis of creation, but they are only a presumption. If it were proved that all the bodies which fill known or conjectured space had once been evolved from a nebula it would still be quite possible that that nebula represented the fatal dissolution of a pre-existing cosmos and so *ad infinitum*, though in the present state of knowledge such a conjecture would be purely arbitrary.

Another point on which the author really founds as largely as upon the resolution of matter into force and force into

will is the fact that consciousness is only the last stage of intelligence, and that conscious thought is determined by data which if normal are objectively valid though lying out of consciousness. This view perhaps is hardly so fully developed as its importance in the writer's system deserves; but it underlies not only the doctrine of faith as unverified certitude, but all the ingenious and perplexed discussion which is meant to establish that an unlimited field for transcendental inference is opened when we once have argued from intercourse with others to personalities which resemble our own.

With such premises and such methods the writer is in a tolerably hopeful condition for attempting a scientific reconstruction of theism, and has risen above the inducements to treat the habitual experience and the familiar ways of thinking of the present generation as decisive presumptions against Christianity.

The most interesting of his special views are on the purpose of creation, where the limits of optimism are stated with great refinement and decorum; on ecclesiastical authority, which is valuable as eliminating individual crotchets; on the psychological interpretation of original sin as the inherited perversion of our faculties caused by the distorting influence of a premature self-consciousness: the contrast between Christian and Stoical morality and the vindication of the doctrine of eternal life from the superficial imputation of selfishness are also meritorious, though it may be less original. The writer's weakness as a theologian is his ignorance of the history of doctrine, which is really a far surer guide to the inner harmonies of truth than the principle of contradiction which he is much too ready to apply upon subjects where the highest ideas must be inadequate. Another consequence of this unhistorical spirit is a disposition to treat the Old Testament more cavalierly than critically, partly because the writer assigns an absolute validity to our present moral ideals, and makes the character which it is our duty to cultivate under our existing relations binding not only upon distant ages, but upon intelligences of an order incommensurable with ours.

But with all these drawbacks the book is not without a substantial value: the writer continues the work of the best apologists of the last century, it may be with less force and clearness, but still with commendable persuasiveness and tact, and with an intelligent feeling for the changed conditions of the problem.

G. A. SIMCOX.

Sacraments and Sacramentals. (*Sakramente und Sakramentalien in den drei ersten christlichen Jahrhunderten.*) Von Dr. Ferdinand Probst. Tübingen. 1872.

DR. PROBST has here undertaken to trace out from such indirect notices as are available—for there are of course no liturgies or rituals of that date extant—the ceremonies and manner of administering the seven sacraments and those lesser rites called sacramentals, such as exorcisms and benedictions, during the first three centuries. And inasmuch as dogma and ritual are from the nature of the case closely connected, this has also involved an inquiry into the sacramental doctrine of the period; only in treating of the Eucharist, where anything like an adequate discussion of doctrine would have been impossible within the limits of the volume, he has confined himself chiefly to the externals of the sacrament. The book is accurate and painstaking, and will be found very serviceable to theological students, though we are not sure that the author has always satisfactorily established his conclusions. Of the general correctness of his estimate of the teaching and practice of the early Church there can be no reasonable doubt. And he is quite right in pointing out that precise statements as to the number and nature

of the sacraments are not to be looked for in the patristic age, to which it must be added that the *disciplina arcani* often increases the difficulty of ascertaining what really was definitely taught. Before the time of St. Thomas the common term *sacramentum* was applied indifferently to sacraments and sacramentals, and Peter Lombard in the previous century was the first to specify the number of seven. But it is not difficult to gather from the Fathers and the Apostolic Constitutions the substance of what was believed and the main outlines of the ritual, and it is abundantly clear that the whole system was in its essential conception the Catholic and not the Protestant one. All the seven sacraments are mentioned—and sometimes by Tertullian, as nearly all of them together—by early writers. Dr. Probst expresses the central idea of the system when he says that Christianity ultimately rests on the Person of our Lord, and that the sacraments, and especially the Eucharist, in which they culminate, are the extension and continual application of His Incarnation and Sacrifice. "The Eucharist, as transubstantiated, takes the place of the Incarnation, and as a sacrifice, of the death of Christ, and conveys to us not merely grace and truth, but Himself." The whole passage may recall to many readers a striking passage of Goethe, setting forth with that imaginative power by which genius can realize intellectually what it never experienced, how in the Catholic idea the sacraments interpenetrate and transfigure as with the radiance of a perpetual benediction all the incidents of human life from the cradle to the grave.

The first part of the volume, which is occupied with sacramentals, examines the ancient theories of demoniacal influence and possession and the various methods of exorcism, and then goes on to describe the different kinds of priestly benediction, as of water, oil, and the like, showing in many cases the close resemblance of the ancient forms to those still in use in the Latin ritual and pontifical. The second part carries us in successive chapters through the seven sacraments, discussing in minute detail the nature, minister, recipient, and time and manner of administering each of them. Considerably the longest chapter, extending over more than a fourth of the entire volume, is devoted to the sacrament of penance, where the whole disciplinary system of the early Church necessarily comes under review. The author has done his work carefully and conscientiously, but he does not appear to us to have thrown much new light on points fairly open to controversy. Thus *e.g.* his argument for union having always formed an integral part of the ritual of confirmation is by no means conclusive as regards the Western Church at least, and the fact of the imposition of hands being alone specified as the means of imparting the Holy Ghost in St. Cyprian and some other early authorities looks the other way; nor is it at all clearly proved that where the sacrament was administered immediately after baptism it had always included a distinct anointing from that which formed part of the baptismal rite. We are rather surprised to find no reference in the chapter on Eucharistic liturgies to the distinction of Eastern and Western usage as to the invocation of the Holy Ghost. The epitaph written by Pope Damasus (366-384) on the acolyte boy Tarcisus, who was beaten and trampled to death while carrying the viaticum to a confessor in prison, affords strikingly explicit—and the more so because purely incidental—evidence to the contemporary belief in transubstantiation.

"Ipse animam potius voluit dimittere cæsus,
Prodere quam canibus rabidis coelestia membra."

We cannot follow Dr. Probst through his elaborate and valuable chapter on the sacrament of penance. But here again, in discussing such vexed questions as the relation of the *exomologesis* to sacramental confession, and the contemporary

evidences of a recognized obligation to confess sins of thought only, he seems to us, after all, to leave the matter very much where he found it. The slender and indistinct notices of the sacrament of unction in early writers are sufficiently explained, as the author justly points out, by the absence of any controversy on the subject, and the close connection of the ordinance with the miraculous *charisma* of healing, as well as by the *disciplina arcani*; and the very direct testimony of Scripture for this sacrament—far more direct *e.g.* than for Confirmation—goes far to supersede the importance of later authorities. Still we were disappointed not to find somewhat fuller information on the subject; here again the distinctions of Eastern and Western usage are not once touched upon. The rite of ordination is shown to have consisted exclusively at this period in prayer and imposition of hands by the bishop; other ceremonies, such as unction and investing with the chasuble, having been introduced later; nor were the minor orders conferred, with the exception of *lector*, before the time of Pope Fabian (238). The concluding chapter on the sacrament of matrimony contains much interesting matter. The absolute indissolubility of Christian marriage is shown to have been strictly maintained, but in the case of adultery a separation was enjoined until the guilty party was brought to repentance; no second marriage, however, being in any case, permitted. Indeed second marriage after the death of the first partner, which is often termed “bigamy,” was discouraged, though not forbidden, as well on grounds of chastity as out of regard for the memory of the former union and the anticipation of a renewed spiritual intercourse hereafter. Third marriages are stigmatized in the *Apostolic Constitutions* as a proof of incontinence, and any subsequent marriage as “open fornication.” Indeed canonical penances were imposed on bigamists and trigamists in the fourth century, of one year for the former and from two to five for the latter: whether the duration was the same or longer in the previous centuries is not now known. Origen, while allowing second marriage for the hardness of men’s hearts, says that it does not correspond to the true idea of Christian marriage, and that “bigamists will be saved, but not crowned.” To the clergy second marriage was (in accordance with Tit. i. 6, and I. Tim. iii. 2) strictly forbidden from the first throughout the universal Church.

H. N. OXENHAM.

Intelligence.

Dr. Keim, whose work entitled *The History of Jesus of Nazareth* is attracting so much attention in theological circles, will shortly exchange his professorship at Zurich for one at the small German university of Giessen. The *Protestantische Kirchenzeitung* for March 29 and April 5, contains a paper from his pen on the epistle of Diognetus, in opposition to the view of Dr. Overbeck, noticed in a recent number of the *Academy*.

Dr. Hilgenfeld, of Jena, has announced a course of lectures on “Introduction to the New Testament,” with a view, we believe, to their ultimate expansion into a volume.

The second volume of the *Protestanten-Bibel* has appeared. The notes are less meagre than in the first volume. We may call attention especially to the commentary on Romans by Professor Lipsius.

The new *Bible Educator*, edited by Professor Plumptre, is rather disappointing. It contains some useful matter, and may penetrate into quarters where the name of Cassell is better known than that of Murray. But we are not sure that we understand the object of the publisher and editor. Some of the papers seem too dry and technical for popular readers, others too meagre and unscientific for scholars. The chief contributors are Dr. Payne Smith, Dr. Ginsburg, Messrs. Rawlinson, Stainer, Carruthers, Houghton.

The *Bible for Young People* is a translation of a popular Dutch work by Dr. Oort, assisted by Drs. Hookyas and Kuenen. It aims at reproducing so much of the results of modern criticism as can be adapted for the purposes of moral and religious education, but may also be recommended to general readers.

The French translation of Nöldeke’s *Old Testament Literature*, announced in our last number but one, has just appeared.

Contents of the Journals.

Centralblatt. March 15.—Otto’s edition of the Apologists, vol. ix., rev. by F. O. [Supplies a carefully revised text, but fails conspicuously in the “higher criticism.”]—April 12.—Lüdemann’s *The Anthropology of the Apostle Paul*, rev. by ψ. [A work of great promise from an advanced critical point of view. But the author credits St. Paul with a logical consistency and a definiteness of intention which can hardly be admitted.]—April 19.—Weiffenbach’s *The thought of Jesus of the second coming*, rev. by ψ. [Maintains with remarkable ability that the second coming or personal return of Jesus was not originally announced by Him in connection with the destruction of Jerusalem and the appearance in the clouds, &c., and that it formed the kernel of the promise of the resurrection. The separation of the second coming and the resurrection, and the sensuous description of the former, are shown to be due to the disciples.]

Monatsschrift für Gesch. u. Wiss. des Judenthums. (Biblical articles.) March.—The “Mons Offensionis” on the Mount of Olives, by Dr. Grätz. [The spot where Solomon erected the high places is shown to have been the most northerly of the three summits of the mountain. But the phrase *har hammashkikh*, rendered “Mons Offensionis,” is simply an ironical monotheistic alteration of *har hammishkiah*, “mons unctionis,” the name by which the Mount of Olives is known in the Talmud.]—April.—Septuagint translation of Ecclesiastes, by M. Salzberger. [Shows that this version abounds in peculiarities of Aquila, to whom it is therefore probably due.]

New Publications.

NIPPOLD, F. Richard Rothe. Ein christliches Lebensbild auf Grund der Briefe Rothe’s entworfen. Band I. Wittenberg: Koelling.
OGILVIE, G. Early Progress of Christianity in Buchan. Longmans.
STEWART, W. The Plan of St. Luke’s Gospel: A Critical Examination. Glasgow: Maclehose.
WEIFFENBACH, W. Der Wiederkunftsgedanke Jesu. Leipzig: Breitkopf u. Härtel.

Philosophy and Physical Science.

On the Psychological Origin of the Idea of Space. [*Ueber den Psychologischen Ursprung der Raumvorstellung.* Von Dr. Carl Stumpf, Privat-Docent der Philosophie an der Universität zu Göttingen.] Leipzig: S. Hirzel. 1873.

THIS very interesting investigation into the psychological origin of the conception of space is an attempt to do for the psychological what Helmholtz has done for the physiological side of the problem. The question discussed has special claims upon English students, because so much attention has been bestowed upon it in this country. Unfortunately English writers upon this subject have not sufficiently distinguished from each other the separate interests of physiology and psychology, and our physiologists have been too much inclined to believe that their investigations have exhausted the whole of the subject and not one side of it merely; while, if we except Mr. Herbert Spencer, our psychologists are so completely carried away with the idea of the omnipotence of “Association” to explain all things and everything, that their theories are never able to satisfy the requirements of the phenomena.

Dr. Stumpf begins with an historical review of what has been already done to settle the problem, and classifies all previous theories under the four following heads. The conception of space is either that of a special combination of momentary sense-qualities, *e.g.* of colours, the one with the other; or a combination of those with the qualities of another sense, *e.g.* with the sensations belonging to muscular feeling; or it does not arise from the senses at all, but is the effect of a special productive activity of the soul (*Seele*), which acts independently of and in addition to sensation; or, lastly, it is perceived in and along with the other qualities given in sensation, and comes into being whenever those are perceived by the corresponding sense. The first is the theory of Herbart, the second that of Bain, the third that of Kant, and the fourth is called by Helmholtz *Nativism*. Of these four theories Dr. Stumpf holds, that the last is the only tenable one, and he believes that the true mode of investiga-

tion is to begin with the results of this last theory, and more strictly determine the precise relation which subsists between the quality perceived and the extension or space in which it is conceived. Colours, for example, he holds, are as necessarily from the outset perceived in a certain extension in space or in a given place as they are conceived to have a certain intensity or strength.

We can only notice the more important results at which Dr. Stumpf has arrived in the course of his investigations:—

(1.) There is a space which belongs to sight, *i.e.* there is something in the sensation which is as directly perceived in consequence of the optic nerve-process as the quality of colour is, and which has all the attributes that we ascribe to space; and this is neither a simple combination of sensations of colours, nor a combination of these sensations with the qualities of another sense, nor something spontaneously produced by the mind over and above sensation. (2.) Space and colour are parts of the same content of sense, *i.e.* they are necessarily comprehended in and with each other. Space cannot be conceived apart from colour, nor colour from space. The contents of the sense of sight include both space and colour. (3.) Space is not originally arrangement in space, still less succession. These are relations founded on space, later discriminations, and not the original conception. (4.) Space, as originally perceived, consists not of two but of *three* dimensions; but only a minimum and not all of the relations of depth are immediately perceived. The *minimum visibile* is a spot situated at a definite distance, either changing or always the same, and this spot as originally seen is *spheroidal*. (5.) The principle of association educates this original conception of space up into the very complex series of relations which belong to the more developed idea; but association cannot account for the original *minimum visibile*.

These are the more important statements made by Dr. Stumpf regarding space in its relation to the sense of sight. The same principles run through his discussion of the relations of space to the contents of the other senses, and we need not refer to the special applications to the senses of hearing, taste, &c.

To the book is appended a short and very suggestive statement by Prof. Lotze of the points of agreement and difference between his own theory and that now submitted to the philosophical public by his young disciple. Upon the whole we are inclined to believe that Dr. Stumpf's theory is a decided advance on Prof. Lotze's, and that this advance is due to his assimilation of the results of such a scientific physiologist as Helmholtz.

Dr. Stumpf has communicated a *résumé* of his investigations and results to the *Göttingische gelehrte Anzeigen*, Stück 10. März, 1873.

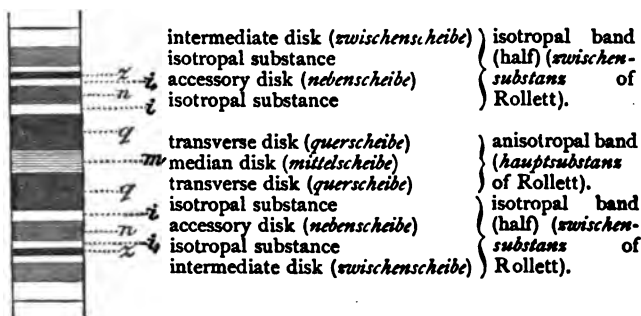
THOMAS M. LINDSAY.

Notes on Scientific Work.

Physiology.

Microscopic Researches on Muscle.—Dr. T. W. Engelmann, of Utrecht, contributes a long article on this subject to *Pflüger's Archiv*. Band vii., Heft i. He laments the difficulty of obtaining the crystalline arthropods of the sea, and observes that the tolerably transparent Cyclops, Gammarus, Asellus, Hydrachinda, and Insect larva as *Corethra plumicornis* of fresh water are only to be obtained in small and insufficient numbers. For the examination of muscular fibres no reagents or saline solutions should be used; they should simply be placed in a moist chamber, and be examined as rapidly as possible after removal from the living body. Insect muscles can undergo great changes in structure before they lose their excitability. He has used a magnifying power of from 200 to 500 diameters, or that obtained by a Hartnack's objective 8 and eyepiece E or F. The structure of normal uncontracted transversely striated muscular fibre is: (1) A light very slightly refracting band divided into two halves by (2) a dark highly

refractile stria; (3) a moderately dark, tolerably strongly refracting band, in the middle of which is (4) a brighter, less refracting stria. In every fibre with very broad transverse striæ the simple dark band can be resolved with high powers into three: a middle darker one, and two lateral clearer or brighter ones. Hence we must admit that such division still exists even where our present means of research do not permit it to be seen. Throughout his paper Engelmann makes use of the following terms: the stria Z in the middle of the isotropical substance he calls the intermediate disk (*zwischen-scheibe*) and the adjoining striæ (i) secondary or accessory disks (*nebenschleiben*). Both of these together, when they cannot be distinguished as separate, constitute the fundamental membrane (*Grundmembran* of Krause); the middle layer (m) of the doubly refracting substances forms the median disk of Hensen, and the two



lateral (q) he terms transverse disks. The figure renders Engelmann's views clear. In the closely striated muscles of vertebrata *z* and *m* appear united together to form a single and simple foundation membrane in which no subdivision can be seen. The distinctly striated fibres of insects, on the other hand, show the division well, and the whole series of disks in one compartment are here sometimes as much as four times thicker than in vertebrata. The height of each set varies even in different muscles of the same animal. The greatest height or length of one compartment Engelmann found to occur in the abdominal muscles of insects where it amounted to 0.011 mm. The isotropal and anisotropal substances are about equal in height, the proportion of the former to the latter being as 6:7. The degree of transparency of the several parts varies considerably, so that now one, now another may be the darker. Where both are of equal transparency the existence of transverse striæ may at first sight be almost overlooked. The distinction is always well brought out by the polariscope. The remainder of the paper is occupied with a special description of each disk in succession.

From his examinations of muscle under polarised light and by other means he has arrived at the conclusion that muscular tissue is composed of an infinite number of rods arranged parallel to the longitudinal axis of the fibres which are naturally in immediate contact with each other, but which after death or after treatment with reagents shrink and exude or excrete the isotropal substance. The size and form of the rods he supposes to differ in each of the disks that make their appearance in the above scheme.

The influence of various substances on the reflex activity of the Spinal Cord.—Dr. S. Meihuizen after remarking (*Pflüger's Archiv*, March, 1873) that many pathological conditions are produced by, or at least are associated with, abnormal modifications of the reflex activity of the nervous system observes that this activity or excitability may be acted on by several therapeutic agents, the number of which has been greatly increased during the last few years. In the present communication he limits his remarks to the action of certain substances on the reflex activity of the spinal cord. Frogs are the animals best adapted for such experiments, because, in the first place, their spinal cord after section retains its activity for several days unaltered, and, secondly, the degree of excitability can be very accurately tested by Türk's method of irritating the skin with dilute acid and determining the contraction induced in the muscles. In other animals this method of excitation proved unsatisfactory, and after trying electrical and thermic means of stimulation, he at length constructed a little apparatus by which mechanical irritation in the form of a slight blow could be given; this he occasionally used, but he seems to have returned to the acid stimulus as the best. The first substance he experimented with was bromide of potassium. The action of this salt is not dependent on the bromine, since chloride of potassium acts if anything rather more strongly, whilst bromide of sodium is ineffective. Bromide of potassium rapidly lowers the reflex activity of the spinal cord, the subcutaneous injection of 0.015 gramme completely abolishing it in one hour and 0.020 gramme destroying it in a quarter of an hour. The question arises, How is this loss of excitability occasioned? There are five possible explanations. It may destroy the sensibility of the periphery of the nervous system, the centripetal or centrifugal conducting nerve tubules, the motor terminal nerve plates, or the muscles. By familiar methods of proof he demon-

strates clearly enough that the salt acts directly on the nerve centres. A similar series of experiments showed that acetate of zinc, hydrate of chloral, quinine, alcohol, caffeine, morphine, and digitaline all rapidly induce great depression of the excitability of the spinal cord, the last however through its action on the heart. On the other hand, atropine, cyanide of potassium, codeine, thebaine, papaverine, narceine, narcotine, nicotine, carbolic acid, theobromine, and ergotine exert little and then only inconstant action on the excitability of the cord.

Researches on the Physiology of the Brain.—In a recent number of the *Berlin. Klin. Wochenschrift*, 1872, No. 42, Hitzig shows that the transmission of a constant current through the occipital region of man causes involuntary movements; when the current is closed, the subject falling towards the anode, and the eyes with more or less nystagmus turn towards the cathode; the opposite movements occur on breaking the current. The same phenomena may be witnessed in rabbits. Similar movements are observed in rabbits, if the small lateral lobe of the cerebellum be removed, and in the hollow at the bottom of which the flocculus lies a piece of ice be placed. In man the involuntary movements of the eye induced by the current give the subject the impression that external objects are in movement, and the movement of the whole body must be regarded as an endeavour to maintain the equipoise. Severe injuries of the cerebellum thus act like the anode; they cause involuntary movements towards the side operated on, so that a rabbit in which the left lobe of the cerebellum has been injured or removed has the impression of lying on its right side. But if in its endeavours to recover its supposed loss of equipoise it turns over too vigorously towards the left it rolls over upon its back and the movements begin anew.

Reflex movements of the Uterus.—W. Schlesinger (*Jahrb. Wien. Med.* 1873) has made some further observations on the reflex movements of the uterus, and shows that electrical excitation of the centric extremity of a spinal nerve induces violent movements of the uterus in from five to fifteen seconds. If in a curarized rabbit on which tracheotomy has been performed the artificial respiration necessary for maintaining life be intermitted the organ at once passes into a state of violent contraction, and the same thing happens if the central end of the median, crural, or other nerve be electrically excited. The conduction of this reflex action, to which also the contraction of the uterus by irritation of the nipples is allied, does not take place through the spinal cord, for if the cord be divided in a rabbit, prepared as above described, irritation of a nerve trunk for forty seconds produces no effect. Further experiments showed that the nervous plexus on the aorta was one, but not the only course by which the reflex influence was conveyed.

Structure of the Pancreas.—According to V. v. Ebner, whose paper appears in *Max Schultze's Archiv für Mikr. Anatomie* (Band viii. p. 481), the alveoli of the pancreas form branched tubes, provided with lateral pouches, but without a distinct lumen, which are bounded by a membrane that is everywhere closed (*Membrana propria*). The excretory ducts proceed from fusiform and stellate cells in the interior of the alveoli, forming the so-called centro-acinar cells. Fibrous or membranous processes are given off from the *membrana propria*, and penetrate into the interior of the alveoli, and by their anastomoses form a reticulum that is continuous with the processes of the centro-acinar cells. The gland-cells lie in the meshes of this reticulum, one cell, as a rule, occupying each mesh. The gland-cells have no processes.

The Air in Public Schools.—In an American journal entitled *The Sanitarian*, the first number of which has just appeared, Dr. Janes, city sanitary inspector, states that from the public schools of America Dr. Endemann obtained seventeen samples of air the examination of which determined the presence of carbonic acid varying in amount from 9·7 to 35·7 parts in 10,000, or in other words from more than twice to nearly nine times the normal quantity. The ventilation in the buildings is faulty, and can only be effected by opening the windows—a practice detrimental to the health of the children sitting near or directly under them. The following experiment, made in the Roosevelt-street School, New York, shows the inefficiency of ordinary ventilating flues in the wall when unprovided with means for creating an upward current. An examination of the air in one of the class-rooms furnished with a ventilating flue was made while one of the windows was open, and yielded 17·2 parts of carbonic acid in 10,000. The window was then closed, and after the lapse of ten minutes another examination gave 32·2 parts of carbonic acid, or an increase of fifteen parts. The air then became so oppressive to the teacher and children that the experiment was not continued.

The Liver Ferment.—Von Wittich contributes a short paper on this subject to *Pflüger's Archiv* (Band vii., Heft 1, 28) in which he states that two years ago he showed the blood to contain a ferment, and that this could be obtained not only from serum containing blood corpuscles, but from serum perfectly free from them. Owing to some difficulties raised by Tiegel he has been induced to repeat his experiments, and has satisfied himself of their correctness. He also shows that a liver from which the blood has been completely washed out contains a certain demonstrable proportion of ferment. He concludes, therefore, that the liver ferment is formed in the cells of the organ itself.

Geography.

Russian Exploration.—Russian exploration is advancing throughout the length and breadth of Asia. Recently we noticed the combined trading and surveying expedition which had been pushed into Mongolia, and now we have intelligence of a journey much farther south. At the *séance* of the Imperial Russian Geographical Society held on the 7th of February it was announced that the expedition under M. N. Prjévalsky to the lake Koko Nor, westward of the province of Shen-si in China proper, and Tibet, was being continued with success in spite of the greatest difficulties. M. Prjévalsky passed the autumn near Sinina on the north of the Koko Nor, and purposed to remain for the winter in the vicinity of that lake. The Russian detachment settled at Krasnovodsk on the eastern shores of the Caspian have greatly extended their surveys towards Khiva during the autumn of the past year. The old bed of the Amu Daria has been examined for more than two-thirds of the distance between the Caspian and the Khivan Delta. Southward the range of the Kuren Dag and the course of the Attreck from its tributary the Sumbara to its mouth have been thoroughly explored, and in the course of these surveys no fewer than eighty-six positions have been astronomically determined.

The Upper Nile.—In the forthcoming number of the *Mittheilungen* Dr. Petermann has published a number of letters received from the traveller Ernest Marno written from various points on the Upper Nile during last year. The letters are illustrated by an original map of the Bahr Seraf (Giraffe) drawn from Marno's observations. This river is a main branch thrown off from the Nile in the region which lies between the latitudes of 7° and 10° N., and which from its wilderness of swamps and rank grass forests, and its deadly climate, has become an almost impassable barrier to travellers seeking the higher regions of the Nile basin from the Egyptian side. It may be remembered that Sir Samuel Baker's expedition on arriving in 1870 near the point at which the Bahr Seraf rejoins the main Nile found that the chief arm of the river had become perfectly closed to navigation, the vast masses of floating vegetation continually brought down by the stream having collected so as to form a new district of many miles in extent, beneath which the river passes by a subterranean channel; and that after an attempt to cut a way through this barrier the expedition tried the channels of the Bahr Seraf, through which it forced a passage, but only with enormous labour and disastrous loss of life.

Marno's letters enable us to understand the difficulties which beset the Egyptian expedition and the horrors to which it must have been subjected. From February to June of 1872 Marno suffered from no less than forty attacks of fevers, and these with dysentery and bronchial diseases, caused it to be supposed by the impurity of the river water, prostrated every man of his company. The country is a network of water channels, which in the rainy season become one vast mosquito swamp. In the dry season the swamp water becomes unfit for drinking, and ants appear in myriads. "It appears that the Seraf" (now the only passable channel of the Nile in this region) "is becoming more difficult of navigation from year to year. This is caused by the grass, the so-called Om Sufa, gaining ground year by year; the few high parts of the river-banks are annually undermined by the river and fall in, filling up the bed with sand and mud, and so it may happen that in a few years the passage by this branch also may become impossible."

Geology.

The Geology of the Eastern Portion of Turkey in Europe.—In 1869 Professor von Hochstetter undertook the exploration of the eastern and central divisions of Turkey in Europe for the Ottoman Government, and published in the *Jahrbuch der geologischen Reichsanstalt* for 1870 the first part of his report on the geology of the country surveyed, comprising Eastern Thrace, the Balkan Mountains, the Roumelian Mountains, and the Despoti Dag or Rhodope Mountains. This important paper is concluded in the *Jahrbuch* for 1872, part 4, 331. In the introduction von Hochstetter gives a detailed description of the physical geography of the remaining region: Central Turkey, or the Vitos territory, and the Upper Morava territory. The Vitos Mountains are chiefly composed of syenite, containing reddish orthoclase, white triclinic felspar, and black and sometimes greenish hornblende, as well as quartz, magnetite, and, not unfrequently, black mica; titanite is also met with in considerable quantities, apatite but rarely. The magnetite of Samakov is worked by washing the decomposed masses of syenite. At places the syenite is penetrated by dykes of melaphyre belonging to the younger eruptive rocks; these appear more especially on the northern slopes of the Brdo Mountains. The elevated plateau of Samakov is separated from the low valley of Dubnica and Radomir by ranges chiefly composed of old crystalline rocks, which connect the Rilo-Dagh with the Vitos. West and south-west of the Vitos we find a system of sedimentary rocks, which in Central Turkey always comprise three different and easily distinguishable series of beds. Everywhere overlying the crystalline rocks is found a system of red or white quartz-sandstone with coloured marls, chiefly red but sometimes grey and green, as well as limestone and dolomite beds. Resting on this base are grey

and white dense limestones and layers of dolomite of extraordinary thickness, which together build up the Golo Brdo Mountains and the Koniavo and Vrbina Planina. It has been assumed that these two series represent, as in the Alps, the Lower Permian (the Rothliegende) and the Lower Trias (the Werfen beds), while the second system of limestones and dolomites belong to the Middle and Upper Trias. It is more probable, however, that they are analogues of similar structures in the northern Carpathians, in which case the lower system would be Keuper, and the limestones with dolomite would represent liassic deposits. The third system is composed of greyish brown shaly sandstones with argillaceous marls, which lie unconformably on the beds of the former systems, and are evidently of cretaceous age. They yield several fossils, amongst them *Ammonites mammillatus* Schloth. of the gault. In this respect also this system corresponds precisely with the Alpine Gosau formation. The igneous rocks of the Lülün and the Vitos Mountains are throughout basic, having the characters of melaphyre, augitic porphyries and oligoclase or labrador porphyries, and are accompanied by sedimentary tuffs, conglomerates, and amygdaloids. The Upper Morava territory, between Vranga and Lescovatz, is chiefly composed of ranges of crystalline rocks which are connected to the south-east with the Rhodope, and to the south with the crystalline chain of the Skardus (Schar-Dagb) and the Pindus; they consist of gneiss, mica-schists, and old clay slate. Numerous rhyolite and trachyte dykes, with abundance of tufa, form another characteristic of this range. Von Hochstetter gives a detailed description of his sections of these divisions of the country, and concludes his memoir with a valuable table of heights, computed for the most part from observations made by the engineers of the Ottoman Empire. Two geological maps of the eastern and central portions of Turkey in Europe accompany the paper.

Traces in Alsace of the Existence of Man during the Glacial Epoch.—At Lahr, Baden, in 1823, and again at Eguishelm, Alsace, in 1866, human remains were found associated with those of extinct mammals, the mammoth, bison, stag, horse, &c., in the loam of the Rhine valley. Those at Lahr consisted of the half of a skeleton minus the head, those at Eguishelm were a parietal and frontal bone; in both localities the characteristic fossil shells of the loam, *Helix hispida*, *Pupa muscarum*, *Succinea oblonga*, &c., were likewise met with. M. C. Grad points out (*Comptes Rendus*, vol. 76, 1873, p. 659) that the loam extends along the whole of the Rhine valley from Basle to Mayence, and is essentially a consolidated glacial mud deposit, consisting of an intimate mixture of fine sand, clay, and carbonate of lime, in some places accompanied with minute scales of mica; the whole being perfectly homogeneous, and without a trace of stratification. In some parts it attains a thickness of more than 60 metres, and in others is entirely wanting, leaving exposed the bed of gravel and sand upon which it is observed invariably to rest, both in the valley of the Vosges and the Black Forest. That this lower and older gravel deposit is of fluvial origin is indicated by the entire absence of erratic boulders and glacial striae, and by the formation of imbricated banks, which M. Daubree has shown to be characteristic of the gravels now being deposited by rivers. The old terminal moraines of the Vosges, like the loam of the plains, always rests upon this gravel. M. Grad believes them in fact to be synchronous formations, and is of opinion that man lived in Alsace during the glacial period.

Silicified Plants of the Upper Coal Measures near Autun.—Among the silicified vegetable remains from the Coal Measures found in the soil near Autun, occur amorphous siliceous masses which enclose small fragments of the stems, roots, and other parts of plants, mostly Cryptogams. M. B. Renault, continuing his researches upon these interesting remains, refers (*Comptes rendus*, 1873, part 13, 811) some of the small detached stalks to the imprints known as *Sphenophyllum*. They are from three to fifteen mm. in diameter, and present on the exterior nodes which correspond to leaf-whorls as in *Sphenophyllum*. In the centre is a vascular axis of a triangular form consisting entirely of tubes diverging from the centre, scalariform or spiral at the angles, where they surround a cylindrical lacuna. This axis is enclosed by a tissue resembling that surrounding the vascular bundles in ferns and some Lycopods. Outside of this, the ligneous axis of M. Renault, are layers of cellular tissue belonging to the bark, which are traversed by eighteen vascular bundles proceeding towards the leaves. The nodosity of the stems and the verticillate disposition of the appendicular organs, as well as the probable number of these parts, are points of resemblance with *Sphenophyllum*, while their internal structure indicates the relations of these plants to the *Lycopodiaceae* and *Marsiliaceae*.—M. Renault also describes the structure of a fragment of a silicified fructification spike, referred to *Annularia longifolia* and found in the same place. The stem is thick and slightly striated, bearing whorls of bracts, very different from the leaves of the sterile branches. Alternating with these are whorls of pedicels, to which are attached two sporangia, above and below; these occupy the whole space between the pedicel and the bract, and contain a large number of minute spherical spores. The axis of the fruit spike shows a broad central lacuna surrounded by a lengthened cellular tissue, containing from sixteen to twenty cylindrical lacunae placed at regular distances apart. These are accompanied by fibro-vascular bundles

enclosing striped ducts which appear to determine the grooving of the surface.

The Dacites of Hungary and Transylvania.—Dr. C. Doelter points out in a preliminary note (*Verhandl. der geol. Reichsanstalt*, 1873, No. 6, 107) that the dacites of Hungary and Transylvania are mostly hornblende and augite andesites, the former always having quartz as an essential constituent, the latter appearing to be mostly free from this mineral. The essential constituents of the dacites are a plagioclase feldspar, quartz, sanidine, hornblende, biotite, augite, magnetite, and apatite, the accessory minerals being chlorite and epidote. The quartz occurs as crystals in dihexagonal pyramids, and in grains for the most part porphyritically distributed. Sanidine is a constant constituent in all varieties of the dacites, varying in amount from ten to twenty-five per cent. of the whole of the felspars, and is usually distributed in a fine state of division through the ground-mass. The structure of the quartz-bearing andesite (hornblende andesite) admits of its being divided into three groups: granitoporphyritic, porphyritic, and trachytic, the latter much resembling the true trachyte. The sanidine in these varieties never exceeds in amount fifteen per cent. of the felspar; the hornblende crystals are very distinct and terminated at both ends, and augite is often present.

Footprints in Carboniferous Rocks of Pennsylvania.—W. D. Moore describes in the *American Journal of Science*, 1873, No. 2, 292, some footprints occurring in the carboniferous rocks near Pittsburgh, Pennsylvania, which he refers provisionally to the genus *Cheirotherium*. The principal characters are, toes of the front foot three, directed to the right, of nearly equal length, thicker and shorter than those of the hind foot; toes of hind foot four, directed to the left; length of foot, 2½ inches to 3 inches. Mr. Moore has given these markings the name *C. Reiteri*. The sandstone bearing them is covered with mud-cracks and very beautiful ripple-marks.

Botany.

Morphology of Carex.—At the meeting of the Linnean Society, March 6th, Mr. Bentham read some remarks on the homology of the perigynium of the female flowers of *Carex*, and the subject was again discussed at the meeting on April 14th. He suggested the theory that the perigynium and seta represent the stamens of the male flowers. It appears, however, to be certain that the seta is an axial and not a foliar structure and that when developed it usually bears rudimentary flowers, as in *C. pulicaris*. The perigynium under these circumstances can hardly be looked upon as perianthial. On the whole Kunth's view, according to which it consists of a single bract with anteriorly connate edges and bearing the ovary in its axil, is probably correct. Some botanists, taking into consideration the manifest bidentate condition of the perigynium, will still probably prefer to compare it with the two lateral bracts in *Calyptrocarya*.

Phyllotaxis.—In a paper read before the Royal Society on February 27th Dr. Hubert Airy propounded a most ingenious theory in explanation of the mode by which one system of spiral arrangement might be made to pass into another. He attached oak-galls in two rows along a stretched elastic band. When relaxed they roll up into a tight complex order, the degree of condensation, and therefore the amount of tension of the axis, being dependent upon the distance which separates the balls from the axis. So far this is excellent, but Dr. Airy proceeds to deduce from it that a two ranked arrangement was the primitive one, and this hardly seems to carry conviction. It is possible that crowded rudimentary organs in the bud might eventually under pressure assume with a slight twist to the axis a spiral arrangement of a higher order. But without any pressure whatever a spiral arrangement of some kind would probably result from the development of lateral organs on a cylindrical axis because they are in that way most conveniently connected with internal structures.

Ebenaceae.—W. P. Hiern has published in the *Transactions of the Cambridge Philosophical Society* a most elaborate memoir upon this family. He enumerates 260 species, of which one hundred are new or not previously described. Of the five genera recognized *Tetracis* has been established for an undescribed Madagascar plant in the Paris Herbarium. The order has its focus in the East Indies, where 86 species of *Diospyros* and 19 of *Maba* occur; *Euclea* and *Royena* are confined to Africa. It is interesting to note that the order is unrepresented in New Zealand, Tasmania, and the Andine region—countries the vegetation of which has many interesting points of contact. Generally speaking *Ebenaceae* are strongest in the tropics in both the old and new worlds. *Diospyros Lotus* is an Asiatic species naturalized along the Mediterranean; *D. virginiana*, which is well known in the United States as Persimmon, is nearly allied. Throughout the memoir any tendency to do more than carefully ascertain facts has been studiously suppressed. This becomes somewhat tantalizing in the account of the supposed fossil species. The author has been at the pains of drawing up a *clavis* of all the fossil remains which have been assigned to this order, good, bad, or indifferent—including even those for which it appears to him that *Ebenaceae* is not the probable family. A less cautious

expression of opinion from one who had critically studied the recent forms would have been valuable. Only two species seem on the whole to have much evidence in their favour—*Diaspyros brachysepala*, which has been found in miocene deposits pretty widely from Greenland to Italy, and *D. Auricula* from the eocene at Radoboj.

The Origin and Affinities of the Raspberry.—F. W. C. Areschoug points out (*Journ. of Botany*, April, 1873) that the raspberry so common in Northern Europe stands apart from all European species of *Rubus* in having its fruit separating from the receptacle and the bark scaling more or less completely from the stem in the second year. Although *R. Ideus* is a variable species it never produces forms connecting it with the others which are found in Europe; it is therefore considered to belong to a distinct type which is probably descended from some older form with simple leaves. The variety known as *R. Lesii* is either allied to this primitive form or is a reversion towards it. In N. America *R. strigosus* represents *R. Ideus*, and as both species meet in Japan and Manchuria, Areschoug believes them to have originated there, the ancestral form being probably now extinct. *R. strigosus* is indeed considered by Maximowicz to be merely a variety of *R. Ideus*; from Japan the former spread eastward, the latter westward. The European herbaceous brambles are supposed by the author to belong to an older Flora than the fruticose. Their tendency to form varieties is very restricted, and they have probably had time to exterminate the related forms which were possibly developed with them from their common ancestors.

New Potato-disease.—At the meeting of the scientific committee of the Royal Horticultural Society, April 2nd, the Rev. M. J. Berkeley stated that the fungus described by Hallier (*Academy*, iii., 135) was perfectly well known. Tulasne figured it in his *Fungi Hypogaei* under the name of *Rhizoctonia*. It was known as the "copper-web" in the Isle of Ely, where it was very destructive to asparagus.

New Publications.

- BARTH, H. Idées sur les expéditions scientifiques en Afrique. Abbeville: Briez.
- BASTIAN, A. Ethnologische Forschungen und Sammlungen von Material für dieselben. Band 2. Jena: Costenoble.
- BLAIS-LANGOUIMOIS, E. Note sur quelques objets anciens trouvés dans le département de la Charente. Angoulême: Nadaud.
- BLEICHER, G. Études de géologie pratique dans les environs de Montpellier. Montpellier: Boehm et fils.
- BRUHNS' LIFE OF ALEXANDER VON HUMBOLDT. Translated by J. and C. Lassell. Longmans.
- DAMES, W. Die Echiniden der nordwestlichen Jurabildungen. Berlin: Friedländer und Sohn.
- DE LACAZE-DUTHIERS, H. Archives de zoologie expérimentale et générale. Coulommiers: Moussin.
- DUVAL, M. et LEREBOLLETT, L. Manuel du Microscope dans ses applications au diagnostic et à la clinique. Paris: Raçon.
- FRIEDLÄNDER, C. Untersuchungen über Lungenentzündung nebst Bemerkungen über das normale Lungenepithel. Berlin: Hirschwald.
- GESELLIUS, J. Die Transfusion des Blutes. St. Petersburg: Hoppe.
- GRANDEAU, L. Recherches sur le rôle des matières organiques du sol dans les phénomènes de la nutrition des végétaux.
- HÉTET, M. Considerations sur le dosage de l'acide carbonique dans les carbonates et sur le dosage de l'urée. Paris: Raçon.
- HOEFER, F. Histoire de la Zoologie. Paris: Hachette.
- KRAATZ, G. Die Käfer Europas. 29^{tes} Heft. Nürnberg: Bauer und Raspe.
- NATIVELLE, C. A. Recherches sur la digitale. Paris: Hennuyer.
- PFEILSTICKER, A. Das Kinet-System oder die Elimination der Repulsivkräfte, und überhaupt des Kraftbegriffs aus der Molecularphysik. Stuttgart: Kirm.
- PICTET, F. J. Matériaux pour la paléontologie suisse, ou recueil de monographies sur les fossiles du Jura et des Alpes. 6^{me} Serie. 1^{re} livre. Basel: Georg.
- PRETTNER, J. Das Klima von Kärnten nach an 42 Beobachtungsstationen angestellten Beobachtungen dargestellt. Klagenfurt: v. Kleinmayr.
- RECLUS, E. Les phénomènes terrestres. Les mers et les météores. Paris: Hachette.
- RIVIERE, E. Découverte d'un squelette humain de l'Epoque paléolithique dans les cavernes des Baoussé-Roussé. Paris: Baillière.
- ROSTAFINSKI, J. Versuch eines Systems der Mycetozoen. (Inaugural Dissertation.) Berlin: Friedländer und Sohn.
- SAGOT, A. Des plantes oléagineuses cultivées à la Guyane française. Paris: Donnaud.
- SCHMIDT, G. Die Laryngoscopie an Thieren. Tübingen: Laupp.
- TYNDALL, J. Les Glaciers et les transformations de l'eau. Paris: Baillière.

Philology.

The Odyssey of Homer. Edited with marginal references, various readings, notes, and appendices, by Henry Hayman, D.D. Vol. II. Books VII. to XII. London: David Nutt. 1873.

THE present volume of Dr. Hayman's *Odyssey* is introduced by a preface of considerable length and interest on the still unexhausted subject of the date of Homer. The occasion of the discussion is furnished by a theory recently put forward by Mr. F. A. Paley, according to which "the poems we now possess were compiled, that is to say were put together, in their present complete and continuous form at some period not very long before the time of Plato;" being "the work of an Ionic compiler of the school and age of Herodotus and Antimachus, or very little before that time." If this is so Wolf in ascribing the composition of the *Iliad* to the time of Pisistratus committed the error of placing it too early by about a century. Also he was wrong in supposing that it consists of older lays merely strung together by Pisistratus and his friends; for Mr. Paley thinks that the compiler "so remodelled the portions which suited his purpose as to put them into the language of his time, which differs in no respect from the Ionic Greek of Herodotus." Consequently when Herodotus quotes the *Iliad* and *Odyssey* he refers to two poems which are not now extant in their original form, and which in fact were at that very time (or very little before that time) going through a process of remodelling and translation into the dialect of Herodotus' own work. The compiler, Mr. Paley suggested, was Antimachus, a poet of Colophon, who is known to have made a *diorthōsis* or corrected edition of Homer. It is certainly difficult to see how the compilation, on Mr. Paley's theory, could be the work of any one else. If Antimachus was either the compiler or at least of the "same school and age," he either edited his own remodelling of the older poems or he edited the compilation of a contemporary. The latter supposition is so improbable that we are thrown back to the former. It is said, indeed, that Antimachus came to recite his poems at Athens, and that his audience by degrees stole away until no one was left except Plato. The anecdote may be apocryphal, but it could hardly be true, and still less could it have been invented, of the "compiler" of the *Iliad* and *Odyssey*. But we are anticipating.

It was due to Mr. Paley's position as a scholar that some one should undertake the task of refutation, and Dr. Hayman has accordingly entered the lists. Out of the abundance of proofs of the antiquity of Homer which start up on all sides he has selected a sufficient number for his purpose, and has thrown them into the form of a reply to Mr. Paley's arguments. Those who remember the interesting paper which he wrote some time since in the *Contemporary Review* will perhaps regret the necessity of giving a controversial form to his present preface. But Dr. Hayman could not do otherwise without appearing to shrink from meeting Mr. Paley on his own ground. Several of Mr. Paley's arguments are derived from a comparison of Homer with the Greek poetry of the fifth century B.C. He maintains that Pindar and the Tragedians do not show acquaintance with "our Homer," and do show acquaintance with other ancient "so-called Cyclic" epics. The former of these positions is somewhat paradoxical. It is true that the Greek poets seldom, if ever, expressly quote Homer, for poets do not usually quote their predecessors; but the great extent to which Homer has influenced all subsequent Greek poetry has long been a commonplace of criticism. As to the latter assertion it is enough to say, as Dr. Hayman does, that there is no direct reference to Cyclic poems in Pindar and the Tragedians. Mr. Paley assumes that every legend

mentioned in later Greek poetry must come either from Homer or from a Cyclic poem. In the former case it is easy in general to point to some difference which will justify him in saying that the poet does not follow "our Homer." In the latter case it is seldom possible to prove any difference (the Cyclic poems having almost entirely perished), and accordingly Mr. Paley infers as complete agreement as he pleases.

Here, however, Mr. Paley neglects an important part of the argument. He makes no attempt to determine the subjects and character of the Cyclic poems themselves, and hardly seems to know that anything has been done in this direction. Yet the whole question of the relation of the Cycle to Homer on the one hand and to Tragedy on the other has been elaborately examined by Welcker, and his views have been adopted, though with large modifications, by most subsequent scholars. It is strange and hardly creditable that the name of Welcker is not mentioned in this controversy. Had Mr. Paley's own researches led him over the same ground we might have felt glad to have his independent results. As it is it would be difficult to say from Mr. Paley's writings what value he would assign to the various materials on which Welcker founded his theory. In the second volume of his *Iliad* he gives the story of the Troica, compiled "from Pindar and the Tragic" (*i.e.* Tragedians), and compares it with Homer. Why does he not also compare it with what is known of the Cyclic poems? The assumption that the legends found in the later poets are the same as those which formed the Epic Cycle is a *petitio principii*, and is the fallacy which vitiates his whole reasoning. As a matter of fact the legends which received literary treatment from the early epic poets were probably a mere fraction of the whole mass of legends current throughout Greece. The Lacedæmonians, says Herodotus, give a version of their early history in which they agree with no poet. There is no proof, to take a single example, that the Oresteia ever formed the subject of an epic. Again, of the whole narrative thus adopted for poetical use the *Iliad* and *Odyssey* form a very small part, the story of a few days out of many years. It is no wonder, then, that the Tragedians did not always choose legends from the Epic Cycle, and when they did choose such legends they did not often resort to the *Iliad* and *Odyssey*. We need hardly add that though the Tragedians took their plots from well-known mythical stories, they would naturally avoid the most familiar of all. It is curious that out of the plays taken from distinctly Homeric subjects a large proportion are Satyric dramas, *i.e.* in effect, parodies.

An important chapter in this controversy is occupied by the evidence derived by Mr. Paley from the remains of ancient art, especially the paintings upon early Greek vases. These paintings, he argues, show a remarkable absence of Homeric subjects and a preference for those which were or may have been treated in "Cyclic" poems. The same fallacy steals in here which has been already observed in the argument founded on the tragic literature. Mr. Paley denies direct connexion between Homer and the paintings because it cannot be proved; he asserts direct connexion between the Cyclic poems and the paintings because it cannot be disproved. In the latter case the explanation, as before, is simple; the poems do not exist. In the former Dr. Hayman has hit the point by arguing that paintings were not meant to illustrate *poems* but *legends*. The distinction is vital, and is worked out by him with great discrimination. The legends were essentially local; in the age of the vase-paintings they had assumed forms which removed them in many cases from the Homeric type; the heroes whom they celebrated were not the heroes of the older epics, heroes of

Thessaly, of Achæan Peloponnesus, and other ancient seats of power, but were those of historical Greece. All this is admirably shown by the account given by Pausanias of the most famous work of early Greek art, the chest of Cypselus, to which Mr. Paley had himself appealed. The chest (probably as old as 600 B.C.) contained representations of "all the more notable legends of Dorian Peloponnesus and Ionian Attica"—the enumeration may be omitted—and "besides all these several scenes from Homer" (p. xliii). "There are five which Pausanias recognised as illustrating our Homer, and apparently designed to do so," while "there is no suggestion or reason for supposing that the other designs bore a like reference to any other poet" (p. xliiv). Since Pausanias frequently quotes the Cyclic poets elsewhere, this goes a long way to prove two points: first, that the subjects of early art were not usually taken from poetry, but from local unversified legend, and secondly, that if there was any poet of sufficient fame and interest to gain a place beside these local legends that poet was the author of the *Iliad* and *Odyssey*. After this it seems a waste of time to argue the matter further. Dr. Hayman's conclusions regarding the vases are simply these: "Homeric subjects appear as soon as groups appear, they are adequately represented, they are even much more" (p. lii). This he shows by a detailed account of very many examples.

Dr. Hayman next examines Mr. Paley's arguments from the language of Homer. He has little difficulty in showing that not only Herodotus, as Mr. Paley maintained, but all the poets, from Archilochus down to Æschylus, are full of Homeric language. This meets the particular argument derived from the coincidences between Homer and Herodotus. Mr. Paley's other arguments under this head are easily disposed of by a simple inspection of the facts. There is nothing more certain in the results of comparative etymology than the high antiquity of the Homeric language, as compared not merely with Herodotus and Attic writers, but also with Archilochus, Pindar, and the Elegiac and Lyric poets generally. Dr. Hayman shows this for the use of the Digamma and the article; and the argument admits of being carried a good deal further. To state it fully would be to recapitulate nearly all that comparative philology has done for the Greek language.

The references to the *Iliad* in Herodotus need not detain us. Dr. Hayman seems here to understate his case. "Where," he asks, "is the difficulty in our finding Herodotus ascribing to Homer, in the *Iliad*, a statement that Paris, in his abduction of Helen, wandered from his course to Sidon and elsewhere?" Where, indeed, when we have the line

Ἥγαγε Σιδονίῃθεν ἐπιπλῶν εὐρέα πόντον

quoted by Herodotus himself? Dr. Hayman has happily explained another passage of Herodotus which even Mr. Grote stumbled over, that namely in which it is said that Cleisthenes forbade the recitation of Homeric poems at Sicyon because they were all about Argos and the Argives. The words *Ἀργος* and *Ἀργεῖοι* are not used in Homer quite in their later sense, but they occur often enough to account for the jealousy of a tyrant of Sicyon.

The geography of Homer is next discussed. The catalogue in the *Iliad* fixes with tolerable certainty the Greek geography of the heroic period: the *Odyssey* allows us to see how far the poet's knowledge extended into neighbouring countries. In both we find abundant proof of antiquity. The great historical races, the Dorians and Ionians, are among the most insignificant in Homer. Such names as Thessaly, Peloponnesus, Europe, Asia, are unknown. "We have no hint at the existence of Cyrene, the legends connected with which fill so many glowing pages of Pindar." The colonies in Italy and Sicily were settled from 800-600

B.C., yet the Homeric geography in this direction is of the most "phantom" character. In short, we can trace a marked advance in geographical knowledge between Homer and Hesiod, and again between Hesiod and Æschylus.

Some of the clearest proofs of the great antiquity of Homer are derived by Dr. Hayman from the mythology. In several cases he shows that we can trace "successive deposits of mythus: the simplest the Homeric, and therefore probably the oldest." Among these may be named the stories of Pan, of Dionysus, and of Herakles. The last instance is especially interesting. Herakles in Homer is a mere man; a hero of an older generation, and a son of Zeus, but as mortal as Achilles or Sarpedon. The only passage which recognises him as divine is in the *véκνία* of the Odyssey (II. 602-4) in a part of the book which bears every mark of later addition. All his adventures in Homer have a simple human character. In later poets we find him delivering Alcestis, releasing Prometheus, fighting with the Giants, founding the Olympian games (which are unknown to Homer), passing to heaven from Mount Ceta. This progress from the local and human to the divine and universal may be traced in the poem celebrating his exploits. First there is the ancient "Cyclic" poem attributed to Homer, the "Taking of Oechalia." The subject of this poem is a single military expedition, in which he is victorious, in his Homeric character of an invincible archer. Then we have the "Heraklea," of Pisander, giving the Twelve Labours, and arming him for the first time with the club of later art. Finally there is the late epic of Panyasis, which related all his adventures. Similar remarks apply to other heroes, e.g. Theseus, Bellerophon, the Dioscuri, and indeed to hero-worship generally as a post-Homeric institution.

Out of many instances of post-Homeric mythology given by Dr. Hayman one other may be noticed, the sacrifice of Iphigenia. Not only is this tragic event wanting in Homer, but the very name of Iphigenia (as of Electra) is unknown to him. The incident, however, as Dr. Hayman might have pointed out, was related in the Cyclic poem called the Cypria, and thus forms one of the many points in which the Cyclic poems stand midway between the Attic poets and Homer.

Dr. Hayman's notes to the part of the Odyssey now published (Books vii—xii) can hardly have justice done them in a brief article like this. They contain a great deal of interesting and varied information, put together in the manner of an intelligent amateur rather than of a professed *savant*. For grammar and construction they are less satisfactory than the notes in Mr. Merry's school edition. It cannot be right to construe *ἡσὶν τ' ἐν φρονέησι καὶ ἀνδράσι νεῖκεα λύει* (vii. 74) "between (those women) whom she discreetly advises and their husbands she reconciles differences," although that explanation is given by a scholiast. With this reading (which is more than doubtful) we must render "She reconciles differences among the husbands of women whom she favours." Again in the well-known place, (viii. 74) *οἴμης τῆς τὰτ' ἄρα, κ.τ.λ.* Dr. Hayman says rightly that *οἴμης* is attracted into the case of the relative, but he does not notice the real difficulty, viz., from what construction *οἴμης* is attracted. At viii. 283, *εἶσατ' ἴμεν* he does not say whether *εἶσατο* comes from *εἶδομαι* or *εἶμι*. His etymology is of a somewhat pre-scientific character. Thus he makes *τεχνήσασαι* an aorist infinitive: and says that 'νήϊς, i.e. *νήϊς*, contains the old English verb-stem "I wis" and the German *wissen*, elsewhere found to involve *δ*, as in *ἁφιδρείησι*, *φοῖδα*, and *video*. Apart from the contempt thus poured upon Grimm's law it seems obvious to remark that *νήϊς*, gen. *νήϊδος*, only "involves" final *ς* in the same way that *ποῦς* (*ποδός*) and every other nominative does so. In an appendix on the pronoun he seems to think that the article *ὁ* and the

relative *ὅς* are the same. Comparative philology is not necessary for interpretation, but it is necessary for derivation.

D. B. MONRO.

Codex Frisianus, en samling af Norske Konge-Sagaer udgivne efter offentlig foranstaltning. Christiania, 1871. (By Prof. C. R. Unger).

THE *Codex Frisianus* is the only remaining vellum of the *Heimskringla* which survived the fatal fire of 1728; it bears its name from a Danish nobleman, Chancellor Fris, who at the beginning of the 17th century possessed the book. It is written in an Icelandic handwriting, about the end of the thirteenth century (rather than the beginning of the fourteenth), but seems soon to have come out of the country and to Norway, for its parchment is unusually white, whereas Icelandic vellums are mostly grimed with soot (black as smoken hams) from the smoky rooms in private Icelandic dwellings. It is a curious incidence that the translation of 1550, by Lauritz Hanson, was made from this very MS.: proof of this is contained in a phrase at the very beginning of the book, where a word in the vellum is superfluous, and then marked as usual with dots underneath the line, "ganga stor havf or vt hofvm sianom." Now the same repetition is found in the translation.*

Later on, whilst the other vellums were in an evil hour incorporated into the University library and met there an untimely end, this MS. happily came into the possession of Arne Magnusson, and is at present under No. 45 fol. of the Arne-Magn. Collection. It contains the *Heimskringla* text, with preface and all, down to King Olave (St. Olave); it then skips over that saga, noticing, "St. Olave's Saga should be put in here," column 145, page 167 of the Edition. It then continues the sagas down to Sverri, but differs, especially after King Harold Hardradi, considerably from the vulgate text of the *Heimskringla*, both in text and in disposition of chapters and episodes. It contains now and then several new things: thus in the little episode of the fisher Thorgils and his capping verses with the king it adds a few new phrases and one or two new verses which are not found even in the complete text of the Hulda. At the end of the so-called *Heimskringla*, the work runs on, but without Sverri's Saga, and the writer passes over to the saga of King Hakon, which is given in a large abridgment (p. 387-983), and complete to the end; this text has served as the groundwork of all the former editions of that saga. The text of this saga used by the transcriber (and abridger) must have been a good one, and even contains at least one episode not recorded in any other existing recension of that saga, viz., the king's touching interview with the queen, his wife, in the very night when he received the first express message of the rebellion raised by her father, Duke Skuli, the king's father-in-law (Edition, page 500).

The Edition is a faithful reprint of the vellum, both text and spelling, yet writing in full all the abbreviations; it is published (as a part of the same series of sagas as the *Flatey-Book* a few years ago) by order of the Government (*efter Offentlig Foranstaltning*), and is accompanied by a brief preface, and by a list of names. The editor is Prof. C. R. Unger, although the text has been transcribed by another hand. The editorial work and get-up, and the paper and printing are plain, correct, and satisfactory.

G. VIGFUSSON.

* See the facsimile in the old folio edition of the Hkr., vol. i., at the head of the preface. The editor has not noticed this in the foot-notes, as being too irrelevant, but sometimes even errors such as these may lead us to truth in tracing MSS.

Intelligence.

It was the intention of the late Professor Goldstücker to bring out, as president of the Philological Society, an Annual Report on the Progress of Philology during the year; and we are glad to learn that the present President (Mr. H. J. Ellis) proposes to carry out this design, and to introduce at the approaching anniversary meeting of the society a report relating to the years 1870, 1871, and 1872, with a view of in future confining the Annual Report to the twelve months ending at the previous Christmas. As the task of reporting on the progress of philology in all its branches is a vast one, Mr. Ellis has invited members conversant with any special department of philology to aid him with their contributions. The reason for beginning with 1870 is that the introduction to the fourth volume of the second part of the second edition of Pott's *Etymologische Forschungen* contains a condensed systematization of philological researches in all their branches, accompanied by a catalogue of the principal works published up to the end of 1869.

Dr. Ethé, who is now engaged in cataloguing the Persian MSS. in the Bodleian Library, has been so fortunate as to discover a number of lyrics ascribed (and apparently with justice) to the great master of Persian poetry, Firdûsi. The text has been published with a metrical translation in the Transactions of the Bavarian Academy. We believe Dr. Ethé has since then found one or more Kasidas, also attributed to the poet of Shahnameh.

We regret to learn the death of Dr. Lottner, well known as a Sanskritist and comparative philologist, and late Professor of Sanskrit, and Assistant Librarian in Trinity College, Dublin.

The *Athenæum* says that the first issue of the Early English Text Society's books for this year will go out at once, and will consist of—1. In the original Series, Dr. Richard Morris's edition of the unique twelfth-century Homilies in Trinity College Library, Cambridge, with a photo-lithograph by Cooke & Fotheringham, and three unique thirteenth-century hymns to the Virgin and God, from the Corpus Library at Oxford, with musical notes, photo-lithographed by Taunt, transliterated (or transnoted) by Mr. A. J. Ellis, and modernized by Dr. E. F. Rimbault.—2. In the Extra Series, Part II. of the "Complaynt of Scotland," A.D. 1549, edited by Mr. James A. H. Murray. All the year's books are in type. The second issue is expected in June, and the third in September.

The same journal also states that M. Mariette has returned to Paris from Egypt, and has brought with him the fourth volume of his work on Denderah, the second of his Abydos, the third of the papyri, and forty plates for his collection of monuments. He has found the remains of the great Temple of Ptah or Hephaestum, at Memphis. The activity of the French Egyptologists will be further seen from the proposed publication of the monuments of the Louvre by M. Maspero.

Contents of the Journals.

Journal Asiatique. VII. Série. Vol. i., No. 2. Février-Mars, 1873. —'Abd ar-Razzâq, et son Traité de la Prédestination et du Libre Arbitre, par M. S. Guyard. [Biographical notice of this independent Sufic theologian and analysis and translation, from a manuscript in the possession of the writer, of his treatise in which divine prescience is reconciled with free will by the demonstration of a moral responsibility. According to Haji Khalfa this author died in the year 887 of the Hijra; but Sprenger, in his edition of 'Abdar-Razzâq's dictionary of the technical terms of the Sufies, has shown that this is a mistake and that he must have lived between 716-736 of the Hijra (A.D. 1316-1335). The writer of the present paper adduces further proof for the correctness of Sprenger's opinion.]—Le Concile de Nicée, d'après les textes coptes. Exposition de Foi. Gnômes du Saint Concile. Par M. E. Revillout. [Among the papyrus collection in the museum of Turin the writer has discovered two fragments, one of which relating to the dogmatic part of the Nicæan Council—it contains the whole of the symbol with anathemas and explanations—the other containing a treatise, also referred to the same Council, on Christian morals and conduct. Of the latter Zoega knew only the title and the first page. The former, being in Coptic and Greek, completes the fragments which Zoega found in the museum Borgia; and shows that the original was not, as M. Lenormant supposes, Egyptian, but Greek. From the high age of the MSS. M. Revillout infers that the Coptic recension was not much posterior to the Council. The Coptic text and a French translation of the two fragments are here given.]—Nouvelles et Mélanges. Ponctuer les Phrases dans les Langues Musulmanes. A letter from Baron P. G. Du Mast to M. J. Mohl. [Argues for the introduction, with some modifications, of the European signs of punctuation into Semitic texts.]—Notices (favourable) of Mr. Denny's *China Review*, No. 1. (by G. P.); Rājendralāla Mitra's and G. Bühler's *Catalogues of Sanskrit MSS.* (by J. M.); Mirza Habib d'Isfahān's *Destouri-Soukhan, la règle du langage, ou mieux grammaire arabo-persane, écrite en persan* (Constantinople, 1872) (by M. Belin); and H. Wuttke's *Geschichte der Schrift und des Schriftthums*, vol. i. (Leipzig, 1872) (by J. M.)

Journal of the Royal Asiatic Society. Vol. VI., Part II. 1873.—On Hiouen-Thsang's Journey from Patna to Ballabhi; by J. Fergusson. [The writer finds reason to distrust the principles of criticism hitherto adopted by those who have tried to trace the route of the Chinese pilgrim. In his opinion there is no necessity for altering the text of those travels in a single instance, either for direction or distance; but, on the contrary, the indications are quite sufficient to determine, within very narrow limits of error, the position of the places mentioned. The discrepancies between his conclusions and the identifications of those who preceded him in this inquiry are so great that the question is evidently one of principle rather than of detail. The most interesting portions of the paper are those relating to the two stages, from *Hiranyapurvata* to *Kāmarūpa* and thence to *Kalinga*. The pilgrim's *Kāncīpura* is here identified with *Nagapata*, not with *Conjevaram*.]—Northern Buddhism; [note from Col. Yule with extracts from a letter from Mr. B. H. Hodgson on a mutilated figure of Padma Pani from Surakarta.]—Hwen-Thsang's Account of the Principalities of Tokhāristān [note on a former paper by Col. Yule.]—The Brihat-Sanhitā; or, Complete System of Natural Astrology of Varāha-mihira. Translated from the Sanskrit into English by Dr. H. Kern. [Continued; Chapters liii. to lxiv.]—The Initial Coinage of Bengal under the Early Muhammedan Conquerors; by E. Thomas. Part ii. [This part embraces the preliminary period between A.H. 614-634 (A.D. 1217-1237). The material for this paper was supplied, by a collection of silver coins recently discovered near the fort of Bihār.]—The Legend of Dipankara Buddha; by S. Beal. [Translated from the Chinese of Djinakūta, a native of Gandhāra in N. India who lived in the time of the Sui dynasty (518-617 A.D.) The legend is supposed by the translator to illustrate plates xxix. and l. of Mr. Fergusson's *Tree and Serpent Worship*.]—Contributions towards a Glossary of the Assyrian Language; by H. F. Talbot. Part iii. [Vocables 292-515.]

The Indian Antiquary, edited by J. Burgess. Part XIII. Bombay, January, 1873.—Chaitanya and the Vaishnava Poets of Bengal; by J. Beames. [Account of the founder of the *Vaishnava* creed, *Chaitanya*, born in A.D. 1486; and extracts from the *Padakalpataru*, a collection of Bengali hymns ranging from the 15th century downwards; the earliest poets being Vidyapati and Chandi Dās.]—On the Rude Stone Archaeology of the Hassan District, Mairur; by Capt. J. S. F. Mackenzie. [The writer complains of the indiscriminate use of the various terms of pre-historic monuments such as *cairn*, *kistvaen*, *cromlech*, *stone circle*, and *dolmen*, and lays down distinctions for them; after which he proceeds to describe the various kinds of remains found in the Hassan district.]—Notes on Junnar Tāluka, Puná Zillā; by W. F. Sinclair. [Account of interesting localities of that district.]—Notes connected with Sahet Mahet; by W. C. Bennett. [Some local traditions regarding the history of Srāvasti.]—Notes on Witchcraft and Demonology in Gujerat; by Capt. E. West. [The local superstitions count five demons who may get possession of human beings, one of them being of the male, the others of the female sex.]—Papers on Satrunjaya, &c.; by the Editor. [Account of the Jaina sect.]—The Desisabdasangraha of Hemachandra; by G. Bühler. [This work of the great Jaina writer of which Dr. Bühler has discovered a MS. promises to supply an abundance of new material for Prākṛit philology; it being a glossary of about 4,000 Prākṛit words with their Sanskrit equivalents. A specimen of the *kosha* is given.]—Memorandum on the Shoe Question as it affects the Pārsis; by Rev. J. Wilson. [On the aversion of Pārsis to the taking off of shoes when entering public or private houses.]—The Prithirāja Rasau of Kavi Chand Bardai. [Extract from the fifth book.]—The Canarese Country compared with the countries adjacent to it; by Rev. F. Kittel. [Translated from the Canarese of Sarvajna, born at Ambalūru about two centuries ago.]—Notes concerning the Numerals of the Ancient Dravidians; by Rev. F. Kittel. [The Dravidian numerals from one to a hundred are independent of Aryan influence; whilst the word for thousand was borrowed from the Sanskrit *sahasra*.]—Notice of Colebrooke's Miscellaneous Essays, second edition (Madras, 1872). Correspondence and Miscellanea. [On the Khatris, by Kāsi Nath.]—On Early Indian Buildings, by J. Fergusson.—On the Sabdachintāmani, a Prākṛit grammar by Subhachandra, by A. F. R. Hoernle, &c.]

New Publications.

CICERONIS, M. T. Epistolæ. Recognovit A. S. Wesenberg. Vol. II. Leipzig: Teubner.
CICERONIS, M. T. Rede für Cn. Plancius. Für den Schulgebrauch erklärt von E. Köpke. (2 Aufl.) Leipzig: Teubner.
DARETIS Phrygii de excidio Troiae historia. Rec. F. Meister. Leipzig: Teubner.
DRACONTII carmina minora plurima inedita. Ex codice Neapolitano ed. F. de Duha. Leipzig: Teubner.
EKKEHARDI primi Waltharius, ed. Rud. Peiper. Berlin: Weidmann.

- ETHÉ, H. Firdûsi als Lyriker. [Aus den Sitzungsberichten der phil.-phil. Classe der k. bayr. Akademie d. Wissenschaften. 1872. Heft III.]
- GROSSER, Oberlehr. Dr. Rich. Zur Charakteristik der Epitome von Xenophon's Hellenica. Barmen: Baedeker.
- HOMERI Ilias ad fidem librorum optimorum ed. J. La Roche. Part. I. Leipzig: Teubner.
- HOMERI Odyssee. Für den Schulgebrauch erklärt von K. F. Ameis. 1 Bd. 2 Hft. 5 Aufl.
- JAHNSSON, A. W. De verbis latinorum deponentibus commentatio grammatica. Leipzig: Teubner.
- JUVENALIS, D. J. saturae. Erklärt v. A. Weidner. Leipzig: Teubner.
- KELLER, Dr. Lud. De Juba Appiani Cassique Dionis auctore. Marburg: Braun.
- KREBER, A. Gedanken üb. die Entwicklung der Conjugation, 1 Heft. Rathenow: Haase.
- MÉLANGES d'archéologie égyptienne et assyrienne. Fasc. 1. Paris: Maisonneuve.
- MUELLER, J. Quaestionum criticarum de Galeni libris *περὶ τῶν καθ' Ἱπποκράτην καὶ Πλάτωνα δογματικῶν*. Specimen II. Erlangen: Deichert.
- PLAUTUS, T. M. Ausgewählte Komödien. Für den Schulgebrauch erklärt v. J. Brix. 2 Auflage. Leipzig: Teubner.
- REGEL, K. Das mittelniederdeutsche Götthaer Arzneibuch u. seine Pflanzennamen. Gotha: Thienemann.
- SCHLEGEL, G. Sinico-Aryaca, ou recherches sur les racines primitives dans les langues chinoises et aryennes. Haag: Nijhoff.
- STRATMANN, Francis Henry. A Dictionary of the Old English Language, compiled from writings of the XII., XIII., XIV. and XV. Centuries. Trübner.
- STUDIEN zur griechischen u. lateinischen Grammatik. Hrsg. v. G. Curtius. Leipzig: Hirzel.
- TEGNER, E. Fäthiofssage. Schwedische Urschrift m. Uebersetzung. Hrsg. von G. v. Leinburg.
- THEOCRITI De Carmine quod dicitur aeolico tertio. Scripsit Edmundus Schneidewind. Eisenach: Bacmeister.
- THEODORI Prodromi catomyomachia. Ex rec. R. Hercheri. Leipzig: Teubner.
- TRACHSEL, C. F. Glossarium der Berlinischen Wörter u. Redensarten. Berlin: Stargardt.

ERRATA IN No. 69.

Page 130 (b) 25 lines from bottom, for "Anelli" read "Amelli."
 " 131 (a) 13 " " top, " "Govet" read "Godet."

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REGISTERED FOR

THURSDAY, MAY 15, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

The *Gallery of Pigeons and other Poems*. Theophile Marzials.
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MOST people have had dreams which they wished to remember at waking ; some have had the fortune to write down their dream before it was broken : unhappily the result is seldom satisfactory. Mr. Marzials' volume has so much of the charm which we expect from a remembered dream that it seems as if it were unreasonable and ungracious to notice the abruptness and incoherence which sometimes make the book as disappointing as a dream recorded. It is easier to be sure that the book is brilliant—and it is in some ways very brilliant indeed—than that it is enjoyable ; and yet it contains as clear evidence as a book can contain that its composition was a source of keen and legitimate enjoyment. The rush of fresh sparkling fancies is too rapid, too sustained, too abundant not to be spontaneous ; only to us who have not the fountain within us there may come a sense that a brook whose course we can trace, though it is neither very bright nor very deep nor very swift, is more refreshing than volumes of spray that are only thrown up to fall down again, though it may shine, as Mr. Marzials' verse does shine, with more colours than the rainbow. This of course is a question of taste, but the fact remains that the interest of the book before us lies apart from most of the ordinary interests of poetry ; it does not depend upon thought or passion, still less upon character or incident ; it does not depend even upon the attraction of some contagious mood : it depends simply and solely on the endless combinations of wonderfully vivid perceptions and the picturesque inventions of a joyous fancy. Picturesque and vivid are only words—they are not definite enough to give a clear conception of the peculiar quality or the peculiar limits of the pleasure to be found in it ; if it is not irreverent to illustrate works of art from toys, we might perhaps venture to say that the picturesque of Mr. Marzials reminds us of a kaleidoscope, and a magic lantern reminds us of the picturesque of Mr. Morris.

Another contrast that suggests itself is between the nine sonnets entitled "Love's Masquerade" and the series of sonnets in Mr. Rossetti's *House of Life*, and it suggests

itself the more naturally because, though the younger poet is thoroughly independent, there is too much resemblance for the hypothesis of suggestion to be wholly impertinent. "Love the Ideal" is perhaps the best of them.

"At noon when every dame had sought her bed
High in an oriel, peacock-plume in hand,
And mapped beneath her all the varied land,
Dreaming from out her dainty book she read,
Till of a sudden, with a flamegirl head,
The one she dreamed of, on light pinions fann'd
Over the sill, did gently swoop and stand
Beside her, quivering for her full mouth's red.

And in his warm god's arms her cheeks so glow'd
She hardly mark'd how, writ in rose and gold,
Her own life's page was past, and hardly show'd
Then with a cry he vanish'd—shivering cold
The night wind swept the corridors ; the bell
Boom'd for one dead, down from the spired chapelle."

One cannot say that there is no thought or passion here ; one certainly could not say that there is no colour in "Willowwood ;" only in Mr. Rossetti's work the inward thought and passion are supreme, in Mr. Marzials' work the outside pictorial fancy is supreme instead. Not that he is incapable of conceiving a subject from within : the outrageously quaint little poem called "A Tragedy" is an audacious attempt to make the fancies of a girl who is drowning herself off a London bridge articulate ; the attempt has been carried through with a curious truth of sympathetic insight into the scared sensations which must take the place of thought at such a crisis ; yet the result is hardly a success, it makes the victim too ridiculous.

Some of the pleasantest things in the volume are to be found among the thirty odd pages of short poems (mostly very short) which are placed after "Love's Masquerades" under the headings Bagatelles, Tragedies, Majolica, and Rococo, which have often, as in "A Court Minstrel," a graceful irony which serves to prevent the pretty conceits from cloying. Even though the author accepts it, "conceits" seems a harsh name for the exquisitely tender fancies about stars which begin—"There's one great bunch of stars in heaven," or for this which is the last of the "Tragedies."

"In the warm wax-light one lounged at the spirit,
And high in the window came peeping the moon ;

At his side was a bowl of blue china, and in it
Were large blush-roses, and cream and maroon.

They crowded, and strain'd, and swoon'd to the music,
And some to the gilt board languor'd and lay;
They opened and breathed, and trembled with pleasure,
And all the sweet while they were fading away."

Such a delicious little snatch of fanciful pathos appeals to everybody; it makes so little claim on the attention, and yet it is so sweet. "A Nocturne" would give every reader who cared for poetry a pleasure that would not be the less singular because he was reminded both of Keats and Mr. Browning. "A Pastoral" opens with a reminiscence of the song in Fra Lippo Lippi which ought to have been repressed, and in "Gabrielle" Mr. Swinburne's favourite motive of voluptuous cruelty is very skillfully transposed out of the key of passion into the key of fancy. When we come to the longer poems it is different; to enjoy them we need not only an appetite for beauty which can dispense with anything like intellectual interest, but a sustained buoyancy of temperament which is rarer still. It may be the author's fault or ours, but if the volume as a whole leaves something of the impression of a kaleidoscope, the "Gallery of Pigeons" leaves the impression that the kaleidoscope has been broken and the bits of glass have fallen out; the bits of glass are very pretty, and they will do as well as ever if only we have a kaleidoscope of our own to turn them in. Seriously, thirty-nine pages is a great deal of space to spend upon the conceit that a lady has a cage full of pigeons which are her "pretties," and lets them out in the morning and shuts them up at night, and that her poet has a heartfelt of fancies which are his "pretties," and as she warns him never come back when he lets them out to praise her. "Parsconete Dowsabella" is better; if we care to attend at all to a country girl who keeps a rendezvous in a lane, sees her lover with somebody else at a dance, and goes out to drown herself, we shall be rewarded for our pains by a profusion of admirable imagery. If the situation is poor and common so far as ethical or intellectual interest goes Mr. Marzials does nothing to enrich it; but for some reason or other it obviously interests him, and he has imagined the physical details of its every moment with an opulent intensity of sympathy which leaves nothing to desire. On the whole we are inclined to place "In the Temple of Love" first among the longer poems. A lover brings his offering to the temple and has a dream there, and wakes and goes away. Both the introduction and the epilogue are very beautiful, especially the epilogue, and please us better than the dream itself, though they are quite in tune with it and enhance its value. The lover dreams he is among lovers who climb a strange mountain and come down over a strange plain to a strange shore, where they dream of being eaten by crocodiles and of being drowned, and wake and dream of dying. The whole thing has a sort of weird, irrational truth and charm about it, and it would be easy to pick out many fragments as picturesque and as musical as this:—

"White
Over the black sand hill
The large white moon rose into sight,
The gliding moon in ghastly light,
Till all the desert plain grew white,
And white the air, and yellow and white,
And shimmering grey, and glimmering white
That filmed along so soft and still."

What can be more soft and vivid? and yet it is not faultless; the writer caresses his own sensation in a way that might easily stiffen into affectation, and it is hardly a sign of mastery of language to turn substantives into verbs without limit, nor is this the only direction in which Mr. Marzials has attempted innovations which suggest a wish that he had

been content to leave our language as he found it. But the real defect of most of the poem is that it is too dreamy to be quite worth reading when we are wide awake; it is full of hitches and repetitions and abruptnesses, just as dreams are, and these of course are intentional, but though they may be true to sleep they are hardly true to art; perhaps too, though these perilous graces have in some sense a right to be there, they presented themselves uncalled. "The Rose of the World" would have been a beautiful poem if its stanzas had grown together visibly out of an organic idea instead of being linked together by unconscious cerebration. However, it would be more than unjust to imply that the author is content to let inorganic prettinesses flow in upon him at random. Though "The Angel of God in the Garden of Phantasy" is a mere swarm of brilliant pictures which crowd each other out, yet the Angel does preach the poet a lesson of concentration, and when the lesson has been learnt a writer of such keen and bright perceptions ought to be a delightful and admirable poet: at present, to speak frankly, both our pleasure and his power are washed away too often in a tepid gush of incoherent ineffectual ecstasy.

G. A. SIMCOX.

Pictures of Danish Life. [*Genrebilleder. Af Carl Andersen. Ny, samlet Udgave.*] Copenhagen: Gad.

MR. MATTHEW ARNOLD speaks somewhere of the sweetness of the intellectual repose that comes to a nation when a great school of "beautiful souls" has passed away into the distance. No language can produce men of genius with the same incessant activity with which Stromboli pours out its ceaseless lava-fires; there is always a pause in which the grass grows over the most startling innovations, a quiet interval in which the voices of those who are not trumpet-tongued can be heard, and this hushed period often produces very graceful writers. Denmark is now enjoying such a pause; its literature is not asphyxiated, like the Swedish, choked with the fumes of one great poisonous masterpiece, but simply resting after the labours of the last generation. Christian Winther, F. Paludan-Müller, and Hans Andersen, poets of whom any language might be proud, are old men, and no colossus has risen up since their day. The two men that lead among the younger poets are, as might be expected, rather eminent for gifts of delicate execution and graceful sentiment than for anything very great in the higher paths of imagination; nevertheless there is much of original, quiet beauty in contemporary Danish verse. Christian Richardt's manipulation of the language, as shown in his three little collections of lyrics, is masterly, and he has solved, what is so difficult a question with modern poets, how to win the popular ear with strictly artistic verse. Carl Andersen has been a much more profuse writer than Richardt, and has not always written with so much precision and grace; but his sensitive and highly trained eye for all that is beautiful in nature, the purity and freshness in tone of all that he does, and a certain pathetic delicacy in the treatment of old-fashioned themes secure him a prominent place in the literature of his day.

We are glad to welcome this collected edition of Carl Andersen's *Genrebilleder*. The book itself, with its primrose-coloured cover and the peculiarly appropriate and poetical design on the same, is in keeping with the graceful and delicate contents. These Pictures of Danish Life are not in verse, they are in very carefully written and semi-rhythmic prose that is even more appropriate to their character than verse would be. They are little prose sonnets, if one may say so, little poems, each complete in itself, and each formed around one thought

or scene or human impulse. Some are mere fantastic visions, some are homely pictures of still life, full of warm colour and subdued sunlight, like De Hooghe's delicious interiors; others, and these perhaps are the most exquisite of all, are sea-pieces, studies from the picturesque sailor-life which forms so large an element in the Danish individuality. "Maiden Else" is one of the most charming of these. Maiden Else is presented to us as a very old woman wearing out her days in the workhouse at Elsinore. The last morning that she ever rises the fatigue of dressing is too much for her strength, and she falls asleep at her bedside in the sunshine. There her last dream is described to us: her sunny early life as a fisherman's daughter, her childish games and playfellows, the shadows that slowly fell over her life, and all her mild patience under grief and disappointment pass rapidly but distinctly before us; but the dream is not over before she faints away and is taken into her bed to die. No subject could well be more commonplace, but it is one of those in which Carl Andersen's quiet force and freshness find especial delight, and one feels one will not easily be able to forget Maiden Else.

Some of the pictures are painted in Iceland, where the poet was born. These are among the most interesting, as the most unfamiliar. There is something very instructive in the Icelandic character, preserving as it does a lofty intellectual and social standing in the midst of difficulties and hardships almost insupportable. We should be glad to see Carl Andersen choose some epical subject from the life of his fatherland. No doubt he would treat it with vigour and success.

The essentially modern spirit in poetry, the newest Renaissance, of which Heine may be said to be the prophet, has found no place yet in Denmark. The Norwegian poets are as modern as heart can wish, and their works are more read in Copenhagen than those of the natives themselves. But the Danes have a horror of what is German, and a contempt for the latest German poetry, and what is written in England and France they do not read. Some day soon, when the reaction is over, we may expect to see a new-world poet in Denmark; at present the Danish writers prefer to look back at Paludan-Müller and Oehlenschläger.

EDMUND W. GOSSE.

Notes and Intelligence.

In a recent number of the *Academy* (vol. iv., p. 126) mention was made of new publications from Goethe's inedited correspondence, shortly to be edited under the direction of the heirs of the poet. The "Scientific Correspondence" of Goethe was collected by Goethe himself, and will fill two volumes; it comprises the years 1812-32, though most of the letters appertain to 1822-27. There are letters addressed to Goethe by Blumenbach, Carus, Loder, Sömmering, Seebeck, d'Alton, Brandes, von Henning, Martius, Nees von Esenbeck, Purkinje, Wermburg, and Zschokke. It appears from them that Goethe kept up the most lively and detailed interest in the progress of science and natural history until the latest period of his life. As this correspondence comprises more than one hundred different names, it is to be expected that not in all letters we should observe that peculiar intimacy of intercourse which appears in the correspondence of Goethe with Martius, or Nees von Esenbeck. The editor, Professor Bratranek, at Cracovia, has added chronological tables indicating the extent of Goethe's correspondence with each person independently of the letters now first published. He has, moreover, prefixed to the letters the various observations relative to the poet's judgments and opinions found in his Annals, and in the published works on his Conversation, &c. There is also a highly valuable index. Goethe's "Correspondence with the Brothers Humboldt" will form one volume. The letters exchanged between 1795 and 1832 by Goethe, and Wilhelm von Humboldt equal in general interest Humboldt's famous "Letters to a Lady Friend," and are of the same importance for German literature as the invaluable cor-

respondence of Goethe and Schiller. Eminent authorities assert that the editing of these two volumes will be found most masterly. Professor Bratranek is already favourably known as the editor of the Correspondence between Goethe and Count Kaspar von Sternberg (1866).

Dr. Michael Bernays, who is already well known by various important contributions to the criticism of the works of the principal German classics, has recently published an elaborate work on the history of the origin of Schlegel's translation of Shakespeare (Leipzig: T. Hirzel, 1872). Besides giving an elaborate account of the origin of this master-translation—which now appears to be not exclusively executed under the influence of the Romantic school, as is erroneously asserted in most works—the author shows on the basis of the extant MSS. that the translation was, in the first place, very carelessly printed and that there remain in it numerous errors to be corrected from an accurate collation of these MSS. Secondly he shows the *genesis* of the translation by producing from his MSS. the different shapes into which Schlegel had thrown this or that line before his final decision. These various readings are highly instructive with regard to Schlegel's poetical development, and attest the different influences under which he began and perfected his work, viz., that of Bürger, Herder, Schiller, and, above all, Goethe. There are also some ingenious aperçus on peculiarities of Shakespearian diction and some fine criticisms on the leading characteristics of some of his plays. Dr. Bernays is one of the few Germans that know how to combine in their writings both accuracy of detailed investigation and the greatest polish of form and style.

We may mention the appearance of a work by W. König on "Shakespeare as a poet, philosopher, and Christian" (Leipzig: Luckhardt, 1873). The most interesting and suggestive part of it is the parallel attempted between Shakespeare and Dante. We think, however, that the book labours under that over-suggestiveness so characteristic of many German works on Shakespeare.

The papyrus roll recently acquired by Dr. George Ebers at Luxor (the largest but two of those known to be in existence) has been purchased by the King of Saxony for the library of the University of Leipzig. It is in good preservation, legible throughout, and the fineness of the character alone would cause it to be assigned to the seventeenth century B.C. It treats of the "medicines for all diseases of all parts of the body," and besides prescriptions and charms—generally ordered to be used together—it contains full and minute descriptions of the diseases themselves and their symptoms. More than twenty affections of the eye alone are enumerated. Besides whatever points of antiquarian or mythological interest it may possess, it promises, according to Dr. Ebers, large additions to the vocabulary of Egyptologists. It is proposed to be published by Professor Ebers during the course of this summer.

According to Dr. W. Reiss, of Heidelberg, by whom the first successful ascent of the crater of Cotopaxi was made last November, the height of the mountain is understated in Humboldt's and other estimates. The barometer gave 19,660 feet, and separate trigonometrical calculations 19,496 feet for the northern and 19,427 for the southern summit respectively.

The publication of Feuerbach's literary Remains has been entrusted to Dr. Karl Grün; the greater part will be new to the public, containing the lectures which he gave as *Privat docent* at Erlangen, biographical notes sketching the course of his mental development, and a number of letters from distinguished contemporaries.

A series of papers by Count Gozzadini, president of the Regia Deputazione di Storia Patria per le provincie di Romagna, read at the sessions of the Society, on "The Towers of Bologna and the families which held them," are full of erudite details, referring in some cases to early and obscure times concerning which the smallest authentic detail may be of value.

"The Sons of Ham," in *Cornhill*, is apparently by a missionary, who, like most people who have seen the African

at home with unprejudiced eyes, believes that he alone of all the so-called inferior races has a certain and perhaps a creditable future before him. The same magazine, under the title "Louis Napoleon painted by a Contemporary," gives the late Mr. Senior's conversations with Mme. R., a lady who was brought up as a sister with the Emperor, visited him constantly when a prisoner at Ham, but ceased to see him after the *coup d'état*, till at his urgent request a reconciliation was effected in 1863. He is described as imaginative, superstitious, obstinate, indolent, without moral sense; otherwise affectionate and amiable. The evidence is such as the friends of a common murderer often bring forward in the hope, sometimes realized, of proving enough insanity to extenuate the crime. The paper is, of course, extremely interesting. There is a full account of the escape from Ham; and the experience of the *parvenu's* son born in the purple is amusingly indicated in the Prince Imperial's comment on Mme. R.'s first visit: "Cette dame doit avoir été très grande amie de papa, ou elle ne m'aurait pas embrassé."

In the *Fortnightly Review* there is a poem of Mr. Swinburne's, "North and South," melodious as always, and this time with no harsher elements jarring with the memory of white flowers and sunlit skies.—"The Scientific Character of Spinoza's Philosophy" is vindicated by Mr. Frederick Pollock, who shows with considerable ability that even where it was impossible that Spinoza should have actually forestalled the latest results of modern discovery, he yet, with a justness of instinct that cannot be altogether accidental, almost always steers clear of direct contradiction, and often leaves a blank space exactly adapted to the reception of the new truth. The writer gives some illustrations of the way in which Spinoza's ideas may be rendered in equivalent modern scientific phraseology, and notices amongst other points the superior moderation of his fundamental demonstration as compared with the Cartesian formula: instead of "I think, therefore I am," Spinoza only reasons "If anything exists, something exists; I exist, therefore something exists."—An account of the Portuguese poets Miranda and Ferreira is illustrated with some literal translations.—Mr. Lang writes on "Mythology and Fairy Tales;" he appears to regard the *Mährchen* as the most ancient expression of a belief in particular fetiches; but this hypothesis seems hardly by itself to account for their wide dispersion without the help of the supposition, to which he only alludes in passing, that "there are necessary forms of the imagination which in widely separated peoples must produce identical results."

We have received the April number of *The Penn Monthly*, a Philadelphia journal "devoted to literature, science, art, and politics." The literary matter is conscientiously done, but has an *amateur* look; the question "What shall Philadelphia do for its paupers?" bears a lamentable likeness in its urgency and difficulty to the same question asked in London or Liverpool.

The latest literary novelty *Im neuen Reich*, or at least in Berlin, is a book edited by Berthold Auerbach and called *Die Erlebnisse einer Mannesseele*—one of those publications that excite a lively, but not very lasting, interest in intellectual drawing-rooms, strongly tinged with curiosity respecting the anonymous author and the extent to which his *Erlebnisse* are historical.

A German paper states that Mr. Bayard Taylor is going to follow up his translation of *Faust* with a "History of the Germans," for which it is said he has the (indispensable) qualification of a slight infusion of German (Suabian) blood, introduced only eight generations ago into his English pedigree.

Art and Archaeology.

South Kensington Museum. A descriptive catalogue of the maiolica and enamelled earthenware of Italy, the Hispano-Moresco, Persian, Damascus, and Rhodian wares forming that section of the Museum, with historical notices, marks, and monograms. By C. Drury E. Fortnum, F.S.A. London. 1872.

MR. DRURY FORTNUM'S catalogue of the collection of Italian pottery in the South Kensington Museum has just appeared, the first of a series on the works of the potter.

Coeval with the most palmy days of Italian art, under the patronage of the Medici, Este, della Rovere, and other great houses of Italy, its subjects taken from the designs of Raffaele and all the first artists of the period, the enamelled pottery of Italy is one of the most remarkable productions of the Renaissance. Prized and cared for "as if so many jewels," it was sent as presents to princes and potentates, and its equivalent in gold offered for it in exchange.

The collection of South Kensington is, says Mr. Fortnum, "one of the richest and most extensive that has ever been brought together, and is particularly valuable from the number of signed or dated pieces which typify and confirm the existence of artistic potteries in various parts of Italy. The Hispano-Moresque wares, those glittering dishes made by the Moorish potters and their descendants in Spain, are also well represented, and the collection of Persian and Syrian fayence, though wanting in some varieties, is rich."

The catalogue is preceded by an introductory chapter, in which Mr. Fortnum gives a classification of the different glazed, soft wares, and after taking in review the vitreous pottery of the East and the stanniferous Hispano-Moresque wares, concludes with an historic sketch of the rise, progress, and decline of the enamelled products of Italy, known under the general name of majolica.

Glazed pottery is divided, according to the nature of its glaze, into glass glazed, lead glazed, and tin glazed or enamelled.

The glass glazed includes the Persian, Damascus, and Rhodian wares. Brought to its greatest perfection in Egypt, tiles and bricks of similar vitreous glaze were made by the Babylonians and Assyrians, in Persia and Arabia. According to Ctesias the walls of the palace at Babylon were covered with coloured representations of the battles and hunting expeditions of Semiramis, and tiles with figures and designs for wall decoration occur in the palace of Nimroud. The walls of the palace of Ecbatana were, as we learn from Herodotus, decorated with seven colours—a statement confirmed by recent discoveries there, and by that of a wall faced with glazed bricks with figure representations found at Khorsabad. The tomb of Mahomet and the mosque at Medina are also adorned with glass glazed tiles—so early applied and so widely spread was this vitreous glaze, the parent of those wares known under the name of Persian, Damascus, and Rhodian.

Little recorded history has descended to us on the subject of Italian enamelled pottery; our chief sources of information are the works of Piccolpasso and Passeri.

Piccolpasso was a professor of medicine, artist, and proprietor of a "botega" or ceramic workshop at Castel Durante. He finished, in 1550, an important manuscript, now in the library at South Kensington, in which he gives a detailed account of the various processes by which these beautiful works of the potter's art were produced: how the clay brought down by the mountain torrents was gathered up from the beds, mellowed, and prepared for use; how the different pieces were formed, the various styles of decoration, recipes for the pigments employed, and the manner of painting and applying the metallic lustres. Valuable as is this work (of which Mr. Fortnum gives an abstract) as regards the details of manufacture, Piccolpasso gives no history of the rise and development of the different fabrics.

This part of the subject is more extensively treated in the work of the Abbate Passeri, published in 1758, in which he gives various details concerning the progress of the manufactures and of the artistic works they produced; but his statements require to be received with a certain amount of reservation, as after the lapse of two centuries all traditions of the art and its products must have been well nigh lost.

What other information we possess on the subject is derived from the works themselves, and by a careful comparison of the different specimens with each other and a close study of their characteristics and their merits, we have, step by step, by a regular process of induction, arrived at great results, and have ascertained the names and products of many manufactures of which the very existence was unknown.

Next to the vitreous are the lead glazed wares, those most in common use in Northern and Western Europe—the only glaze known there until the discovery of the tin enamel.

But the lead glaze was transparent and showed the dark colour of the paste underneath. In order therefore to obviate this difficulty and to produce a white surface fitted for painting, an intervening process was adopted. A fine white earth was ground, purified, and reduced to the consistency of cream—"slip" in modern parlance, the "engobe" of the French potter. Into this the piece was dipped and slightly baked to fit it to receive the decorations, after which it was covered with the lead glaze "*marzacotto*," variously coloured yellow, green, blue, or black, applied wet, after which process the piece was again fired. To the lead glazed class belong the earliest wares of Italy, *mezza majolica*, painted and *graffito*.

Graffito, one of the rudest forms of ornamentation, consisted in scratching the pattern with an iron tool through the white engobe or upper layer, thus showing the design in low cameo on the red clay beneath. It was then covered with the glaze splashed or spotted with colour. We find the same style of decoration in the French pottery of the Middle Ages, and it has been lately successfully reproduced by Minton. The term "*graffito*" is applied to the object so ornamented.

Of *mezza majolica* are the "*bacili*," so correctly described by Passeri, large, clumsy dishes of flesh-coloured clay with a circular "*giretto*" behind, invariably pierced with two holes for the purpose of hanging them against the wall, the outlines of the archaic figures traced in blue, the flesh white. A scaled or chequered border generally surrounds a portrait bust in profile. These dishes were made during more than a century, as is evident from the persons whose portraits or arms they bear. The great characteristic of these dishes is their admirable "*madreperla*" lustre, for ever changing as the light is reflected from their brilliant surface. Passeri claims these productions for Pesaro, in which he is borne out by many of the portrait busts being those of the Sforza princes, lords of Pesaro and great patrons of *mezza majolica*. The lusted pigments were certainly introduced from Pesaro to Gubbio, where, under Maestro Giorgio, they attained an excellence unsurpassed. The application of them seems to have been confined to these Urbino cities and to Diruta, in the Papal States. Of whom did the Italians learn the art? The metallic decoration was used in Persia and Arabia upon the glass glazed pottery previous to its application to tin glazed wares by the Eastern potters of the Balearic Islands, Spain, and Sicily, and that it was used in Italy before the introduction of the tin enamel, we have abundant proof in the lead glazed *mezza majolica*. Some suggest that Pesaro, being situated on the Adriatic, may have learned the art from Persian or other oriental emigrants fleeing from persecution in their native country, while others suggest that the Moorish potters of Majorca or Spain conveyed the knowledge to Italy—an assumption borne out by the term *majolica* being in the first place confined to the lusted tin enamelled wares. Modern writers propose to restrict it to its original acceptation. It is also a curious fact that nearly all the specimens of Hispano-Moresque ware which adorn our cabinets and enrich our museums have been procured from Italy, showing the estimation it was held in in that country.

There is no record of Italian pottery coated with tin glaze before the time of Luca della Robbia, who, simultaneously with his enamelled terra cotta sculpture, painted on the same vehicle or upon flat surfaces. Of this the series of medallions representing the twelve months, now in the South Kensington Museum and supposed to have been painted by him as part of the decoration for the study of Piero de' Medici, is sufficient evidence.

Earliest in the use of the tin glaze, earlier probably than Faenza, is the fabrique of Caffaggiolo, near Florence, its existence only known by its works. Here, among the romantic scenes of the Apennines, was a villa of the Medici, the favourite residence of the great Cosmo, who assigned for the preference he gave it the singular reason that all the country he could see from his windows was his own—he "was monarch of all he surveyed." It was also the chosen retreat of Lorenzo, and where his sons Giovanni, the future pope, and Giuliano passed much of their boyhood. Here, under the fostering care of the Medici family, arose a manufacture which seems to have been the centre of ceramic art in Tuscany. Mr. Fortnum says:—

"It was but a few years since that the ill indited name of this '*botega*,' noticed upon the back of a plate, was read as that of the artist who had painted it until the discovery of others more legibly written proved that at this spot important and highly artistic works had been produced. The occurrence of a monogram upon several, and the comparison of their technical details, have led to the recognition of many others, and revealed the fact that this fabrique had existed from a very early period."

It has left no record of its artists. The characteristics of this ware are its deep masses of intense cobalt blue, brilliant as lapis lazuli, often forming the background of the picture; a liquid copper green, and an opaque, bright Indian red—a colour exclusively confined to this fabrique and Faenza. The pieces are covered with a rich, even glaze of the purest white.

The museum is rich in specimens of various dates, some of extraordinary beauty. Among the many may be instanced the celebrated Bernal plate, representing a *majolica* painter in his studio painting a piece in the presence of two personages of distinction, incorrectly described to be that of Raffaele and the Fornarina, the figures in clear relief on the dark blue background. A St. George, after the well-known masterpiece of Donatello, and a large circular plateau or dish, the subject Pope Leo X. in a procession borne upon men's shoulders, the composition consisting of fifty figures—one of those gigantic dishes called "*piatti da pompa*," made not for use but for display, to be placed with vases of rich form on the "*dressoir*" or high-backed sideboard.

The "*palle*" and other insignia of the Medici are painted on many of the Caffaggiolo pieces, and the family motto "*Semper*," first taken by Lorenzo the Magnificent and continued by his sons and also by his nephew, Pope Clement VII. Another more mysterious motto is of frequent occurrence, the word "*Glovis*;" it was the *impresa* of Giuliano, Lorenzo's third son. Read backwards it makes "*Si volge*" ("it—that is Fortune—turns"), Giuliano meaning to imply that fortune, which had hitherto frowned upon him, was now turning in his favour. Giuliano assumed the device upon being appointed gonfalonier of the Church. It is to be seen on a fine pitcher in the South Kensington Museum, and so often occurs as almost to lead one to infer that he was intimately associated with the Caffaggiolo works.

M. Jacquemart surmises that Luca della Robbia learnt the nature of the tin enamel at Caffaggiolo—it is more probable that he taught it there, for that fabrique adopted it at a very early period, and there is no piece of *mezza majolica* known to have been produced at Caffaggiolo.

The products of Siena have a close affinity to those of Caffaggiolo, and probably the art at Siena emanated from the grand ducal fabrique. The works of Maestro Benedetto are worthy to be ranked among the finest productions of the sixteenth century. A plate by him with grotesque border and the figure of St. Jerome in the desert may be considered the type of the master and is one of the gems in the South Kensington collection.

The introduction of the tin enamel and the superiority of its opaque white as a ground for painting seem to have stimulated the development of artistic pottery throughout Italy, but in order to study to any advantage the various ceramic establishments and their artists they should be distributed in geographical groups.

To begin with those of Romagna or the Marshes, Faenza has been ever held to be of the highest antiquity—an antiquity, however, which it shares with Caffaggiolo and the Umbrian cities of Pesaro and Castel Durante. There is little doubt but that it gives us the term "faïence," though claims have been set forth in favour of an obscure town near Fréjus. The productions of the Casa Pirotta, dating from 1490, are of the highest order as regards decoration and artistic painting; the wide borders of grotesques painted in a pale blue and white on a dark blue ground, "sopra azzurro," and the red pigment called "rosso di Faenza," which is also to be seen on the Tuscan ware, are characteristic of this "botega," the distinguishing mark of which is a crossed circle, with a pellet in one division. Nearly about the same time Baltasara Manara, another artist, became celebrated, but few fine examples by him have descended to us; the seventeen pieces in the Correr Museum at Venice, part of a beautiful service or "credenza," are moreover ascribed to Faenza.

The pure and delicate style of its "istoriato" pieces and the elegance of those decorated with arabesques caused the Faentine majolice to be much sought after. Duke Alfonso of Ferrara ordered a set of pharmacy vases for his spezieria; the cardinals sent in embassy carried it to Rome and France, and Henry III. was so charmed with the beauty of this pottery that we find him, in 1580, giving large orders, which he desires to be executed with the "vitesse des enchantements."

One ornamental style in which this fabrique specially excelled was the composition of low cups or dishes on feet, impressed or moulded generally in gadroons, and rivalling metal work in elegance. They were called "scannellato" and "smartellato." Pieces were often decorated in compartments, called "a quartiere," of varied grounds, cobalt, yellow, orange, or dark blue, with white grotesques and a central medallion. These harlequin plates seem to have been in great request, and were copied at other fabriques.

The "coppe amatorie" were a gallant invention of the age—small plates with a deep cavity in the centre, and broad brims decorated with musical instruments, written music, or grotesques. Young people at balls offered these to their partners filled with sugar-plums or preserved fruits, and when the lady had emptied the cavity of its "confetti" she generally found depicted at the bottom an "amorino" or some equally eloquent emblem, which no doubt the offering had led her to anticipate. The backs of the Faenza plates are usually decorated with concentric circles, scroll work, or other devices.

Forlì, Rimini, and Ravenna, with some smaller places, complete the Romagnan group. In that comprised in the recent States of the Church, the most important is Diruta, a dependency of Perugia. It was only a few years since that this fabrique was made known by its signature. The subjects are painted in blue outline, and are lustred with a brassy-gold colour, evidently copied from or derived from the

"bacili" of Pesaro and Gubbio; but the use of the metallic lustre at Diruta was not so exclusive nor applied upon wares of such high class as in the Umbrian fabriques.

It was in the hill cities of the duchy of Urbino, under the patronage of its della Rovere dukes, that the art flourished to its greatest extent at its four great centres, Pesaro, Gubbio, Castel Durante, and Urbino. The enamelled glaze, "majolica fina," as he terms it, was, according to Passeri, introduced in 1500 into Pesaro. The mezza majolica of this fabrique has been already referred to, but its brilliant metallic lustres, reflex of Moorish taste, appear to have rapidly declined in favour at Pesaro as they became developed at Gubbio, and from the accession of Duke Guidobaldo II., in 1538, the "istoriato" taste came in, and painted works of the greatest perfection were executed in the Lanfranchi botega at Pesaro, inspired by the designs of Timoteo della Vite and other artists of the Umbrian school. It was in favour of Jacomo Lanfranco, who had discovered the secret of applying pure gold upon his wares, that Duke Guidobaldo issued an edict in 1567. No authenticated piece by him has descended to us, the only known gilded majolica being that of Castelli, unless a cup in the South Kensington Museum can be assigned to his fabrique. It is decorated with Cupids upon a pale grey ground, and enriched with real gold burnt in upon the glaze.

Gubbio retained its speciality for the metallic lustres, but its fame is almost entirely associated with the name of Maestro Giorgio, a gentleman of Pavia, who having received in his own country the honours due to him as a statuary and ceramic artist, emigrated to Gubbio. His botega was the great centre of this style of embellishment—indeed he would almost appear to have had the monopoly of its use, and to have applied his lusted pigments to the works of the artists of Urbino and Castel Durante, though M. Jacquemart is very indignant at the idea of so humiliating an occupation. Nevertheless there is every presumption that such was the case, and that either Maestro Giorgio or his son Cencio applied their ruby, golden, and opalescent tints as required. The secret of these pigments and the mode of using them was strictly guarded, but from Piccolpasso's account it would appear that the pieces are fired in an open furnace exposed to the direct action of the flames. The pigments consisting partly of metallic salts, after some time being exposed to a simple heat, have then directed upon their glowing surface the heated smoke given off by faggots of broom thrown upon the fire; this smoke, being in fact carbon in a finely divided state, has great power at a high temperature, reducing the metals from their salts and thereby decomposing them, leaving a thin coat of mixed metal, varying in colour and iridescence from admixture with the glazes, and producing the beautiful effects so well known.

The Museum series of the works of Maestro Giorgio is very complete, ranging from 1501 to 1532; his choicest productions are dated 1525; many equal in quality, both as regards drawing, colouring, perfection of enamel, glaze, and lustre, his most celebrated works, such as "The Stream of Life," "The Three Graces," and "The Judgment of Paris" of Mr. Fontaine, and the splendid dish, perhaps the finest example which has come down to us, lately acquired by Sir Richard Wallace from the Parpart collection, the subject Diana and Actæon, surrounded by a rich grotesque border of dragons, serpents, masks, and trophies. There is a good figure of it in M. Delange's splendid work. The borders of this earlier period differ greatly from the later Urbino arabesques, and are generally grounded in dark blue or yellow, and executed with great delicacy of touch and power of colouring. In 1560-70 the use of the lusted pigments was abandoned.

Castel Durante was early the seat of ceramic industry, and not only produced fine wares at home, but furnished potters and painters to the greater part of the workshops of Italy, and sent ceramic colonies to foreign countries. The Pellipario or Fontana family went thence to Urbino, others to Venice, Florence, Ferrara, and Rome, to Flanders, France, and Corfu. Batista Franco designed for her artists, and Duke Francesco Maria made Castel Durante the ducal residence. Its wares are characterized by the richness and purity of their glaze; subject pieces do not seem to have been so abundantly painted there as in some other manufactures, but grotesques, generally arranged in the style called "a candellieri," are the favourite mode of decoration, and the oak foliage elegantly interlaced "a cerquato" was frequently used as decoration in compliment to the della Rovere family.

The residence of Duke Guidobaldo II. at Urbino drew more favour to the potteries of that city, which produced some of the finest specimens of the great national manufacture. At the same time it must be remembered that Urbino claimed more than she actually made, the name being that of the duchy the appellation of "Urbino faïence" was indiscriminately applied to vases made at Castel Durante, Pesaro, and Gubbio.

Most important among its artists were the Fontana: their bottega, created by the enterprise and sustained by the industry of one family alone, produced the choicest specimens of the Urbino furnaces, magnificent vases of unsurpassed beauty, cisterns of large size richly "istoriati" with subjects from sacred, profane, and classic story, admirably modelled and of rich glaze, masterly execution, and bold colouring. Duke Guidobaldo, a great patron of the Fontana family, sent services "credenze" to the Emperor Charles V. and to Philip II. of Spain, for which Raffaele dal Colle and Batista Franco furnished the designs. These, as well as the famed Spezzeria vases, were executed in the bottega of Orazio Fontana, who, says Passeri, had no equal in the execution of his paintings and the distribution of his colours.

At Urbino also worked Francesco Xanto, who appears to have passed twelve years in the service of Dukes Francesco Maria and Guidobaldo II. At the summit of his artistic career and at the period when the taste for metallic lustres was at its height, he yielded to the general fashion and sent his pieces to Gubbio, where they were profusely lusted with its iridescent colours. Xanto may be considered to represent the "majoliche istoriate" of the period. He borrowed largely from Raffaele figures and groups which he applied most happily to the subjects he had to represent.

The so-called Urbino arabesques are of great celebrity, subjects painted in medallions, surrounded by beautiful grotesques on an enamelled ground of the most brilliant white. In 1560 the art was at its height at Urbino.

"But," says Mr. Fortnum, "excellent and highly decorated as are the finer products of this period from the furnaces of the Fontana of Urbino and of the Lanfranchi of Pesaro, to the true connoisseur, they want the sentiment and expressive drawing, the exquisite finish and delicacy, the rich colour and the admirable design of the earlier works produced at the Casa Pirola, at Florence, Forlì, Castel Durante, Siena, and Caffaggiolo in the latter years of the fifteenth and the first quarter of the sixteenth centuries (1480-1520), and by Maestro Giorgio at Gubbio, many of which rival in beauty the exquisite miniature illuminations of that palmy period of Italian art."

In 1574 Duke Guidobaldo died, Batista Franco and Orazio Fontana having preceded him, and the art rapidly declined. His successor, Duke Francesco Maria II., abdi-

cated in favour of the Holy See, and the rich collections of the duchy passed to Ferdinand de' Medici, who had married his granddaughter Vittoria, and were removed to Florence; and the Urbino artists passed into other localities.

We do not enter into the history of the northern duchies, the Piedmontese and Lombard cities, the potteries of Venice, Naples, and the Abruzzi: all produced wares of some excellence, but wanting in the delicacy and richness of the earlier works and in that vigorous and powerful colouring so strikingly apparent in the productions of the furnaces of the Urbino duchy and the circumjacent districts of Romagna.

Mr. Drury Fortnum's catalogue raisonné is most conscientiously executed and the result of serious investigation. He has made a most patient and careful study of the various pieces before arriving at the conclusion he deduces of the various manufactures to which to assign them. On many of the fabriques themselves and on the works of their artists he has thrown much new light and settled many vexed questions, entering of course more fully on his special subject than the more general histories of ceramic art of Mr. Marryat and M. Jacquemart would admit of. There is yet much to be learned as ancient documents are from time to time brought to light, but the present volume contains all that is now known and more than has hitherto been published on the history of enamelled earthenware in Italy.

F. BURY PALLISER.

PUBLIC WORKS AND ANTIQUITIES IN ROME. II.

DURING many months the works on the Palatine have been suspended, owing (it is stated) to the outlay requisite for other contemporary undertakings, particularly those on the Forum and in the *Thermæ* of Antoninus. This is to be regretted, for the Palatine *scavi* had led to the discovery of a most important group of ruins, long buried and completely forgotten, on the western ridge of that hill. From the difficulty of identifying these remains with any known edifices of the Kings or of their period, one may conclude (or at least conjecture) that we see here before us such proof as can be afforded by monumental testimony of the existence of a Rome anterior to Romulus—of a small but strongly fortified city, with temples and public buildings, occupying the higher ground where this hill overlooks the valley of the Circus Maximus. The ruins on the highest platform of the ridge appear to belong to a temple with cella and atrium of narrow dimensions, though surrounded and divided by walls of immense thickness, now reduced to the height of two to three feet, in some places much lower; the material being granular tufa regularly hewn and laid in courses, apparently without cement. Lower down, westward, are other ruins in similar hewn blocks of friable and yellowish lithoid tufa, probably from the quarries of this hill; and one side of these singular ruins overlooks a narrow court, bounded at the west by the remnants of an arcade in similar ponderous stonework, the arches still in great part buried under ground. Some of the Roman archaeologists suppose this to be the substruction of the oft-renewed cottage, so venerated by the ancient Romans as that of Romulus, or of his foster-father Faustus. Problematical as is the origin of these venerable buildings, the internal evidence of high antiquity is conveyed in their massive construction. One feels a certain awe while contemplating such "ruins of a world gone by," now become mysterious and almost unintelligible, but telling us, as apparent to archaeological speculation, of a primeval city that reminds of Evander and Æneas, heightening our interest in the Virgilian Epic, which idealizes to immortalize the primeval legend. In the course of the works on this spot have been dug up numerous fragments of terracotta, like those abundantly supplied in the tombs of southern Etruria. Below these Palatine ruins is another remarkable detail, no doubt connected with them, and brought to light about the same time: a very steep ascent up this ridge of the hill passing through walls, now reduced low by decay, but still of stupendous strength and thickness. Here we may (with Roman antiquarians) recognise what Plutarch calls the "stair-

case of the beautiful shore," and also the "descent from the Palatine to the Circus Maximus." Some of the *siglæ* found in the other walls, on the higher grounds, resemble the ancient Italic characters.

The other Palatine ruins, where recent works have led to noticeable results, are those on the south-western side belonging to the additions made, and described as most splendid, by Domitian; partly also to the latest amplification of the palatial buildings due to Septimius Severus, after whom no other emperor added any important structures to the imperial residence on this hill. Most conspicuous is the part recognisable as the *Stadium Palatinum*, mentioned by few ancient writers, but certainly founded by Domitian, and restored, or enlarged and embellished by Severus. Suetonius mentions the constructing by Domitian of a place for such games, races, spectacles, &c., as were usual in the Roman stadium, but without particularizing the site of that edifice on the Palatine. According to Church-legend this area was the scene of the martyrdom of S. Sebastian. It probably divided the palace of Augustus from the buildings of the two later emperors. Works were commenced here by the Papal Government several years ago. Resumed under the new authorities, they have been carried out, with the more interesting results, under Signor Rosa's direction in 1871. A great hemicycle, or exedra, was in that year completely disencumbered of the soil which had concealed the whole lower part, as well as the remnants of a magnificent colonnade with marble and granite shafts extending in front. A valley, partly natural, but to a great degree artificial, is now laid open, running from east to west; this area for the stadium being of measurement exactly corresponding to the prescribed length for such places of entertainment, namely 625 feet. At the western extremity it is bounded by a hemicycle of walls, still lofty though much decayed; and below these, in the hollow alike describing a curve, are the remains of what seems to be a decorated fountain. The great exedra is in two storeys, the ground-floor consisting of three spacious halls, in which are remains of paintings manifestly of the period of the Roman decadence, though not without grace in design; one singular object among the details here seen being a globe fixed in a frame, perhaps intended for the celestial sphere—such as we know were used in the ancient schools of astronomy—if for the *terrestrial*, affording proof that the ancients were acquainted with the sphericity of our earth. All that is left of architectonic decoration in many-hued marbles, rich incrustations, shafts of granite and Carystian marble, and other relics of an overthrown portico with colonnades, among these ruins, gives the idea of splendour and wealth of material the most profuse.

The works on the Forum are actively prosecuted, and do not fail to be rewarded by the exhaustless wealth of antiquities from time to time appearing below the dust of ages on this chief historic theatre of Rome—the great centre of actions, memories, traditions, from the poetic legend of the vision of Castor and Pollux, after the battle on the Regillus lake, to the great and holy S. Gregory, and his contemporary the infamous Phocas, autocrat of the Eastern Empire. Since the spring of the past year most memorable discoveries have been made here. The whole of this classical area has been laid open to its ancient level from the column of that Greek Emperor, at the north-east, to a line almost parallel with the temple of Antoninus and Faustina at the south-east angle. A broad channel of the Cloaca Maxima, lined with immense blocks of lithoid tufa, was uncovered below the pavement at the southern extremity of the Julian Basilica; and presently were found a great many remnants of statues, some superior, some very inferior in style, besides many curious epigraphs and dedications on basements, among the *détris* of that great edifice, built by Augustus on the site (as supposed) of the earlier Sempsonian Basilica, that, namely, founded by Tiberius Sempronius Gracchus, father of the celebrated tribunes Tiberius and Caius. Among the more valuable epigraphs is one in honour of Augustus, here styled *Princeps Juventutis*, on a tablet erected by the *Senatus Populusque* in the year of the city 754. A profusion of marble fragments, sculpture, and architecture lay strewn around the temple of the Dioscuri, now extant only in three beautiful Corinthian columns on a lofty stylobate, and a remnant of the cella with some of its mosaic pavement. Among the fragmentary sculptures found in this vicinity, and serving to attest the splendour of that temple as restored by Domitian, are

to be distinguished a portion of a colossal statue resembling the Farnese Hercules, an archaic relief of Hygeia and Minerva, and a bust of the Emperor Constans. Among the epigraphs strewn over the same surface, is one variously commented on, inscribed in small archaic letters on a broken cornice with the name of Romulus, here twice designated as "*filius Martis*." Distant from that temple of the Dioscuri only a few yards, and divided from its front by the ancient road on the east side, rises a ruin-heap, now like an irregular and much furrowed mound of earth, supported on two sides by massive buttress-walls, the whole standing on a platform paved with travertine, and ascended by a few ruinous steps from the surrounding level.

Here we see one of the most important of historic monuments yet discovered, after long interment under accumulated soil, that "*Ædes Cæsaris*" raised on the spot where the great Dictator's body was burnt, and dedicated by Augustus, B.C. 28. The origin of these now formless ruins, utterly despoiled of their marble adornments and of all architectonic details, is further attested by the curved platform of stonework communicating with an elevated space in front, below where stood the peristyle, the now lost colonnade of which is known to have been Ionic, with only four pillars forming the façade of the cella. In that semi-circular platform we recognise the "*Rostra Julia*," placed here by Augustus, and from which thenceforth were pronounced the funeral orations of all those emperors, buried or burnt on the pyre in Rome, to whom such posthumous honours were not refused. We now see three distinctly recognisable Rostra on the Forum: this last discovered; another, alike a curved platform, and still lined with rich marbles, close to the Arch of Septimius Severus (probably a restoration by that emperor, or of about his period), and the other more ancient Rostra at the base of the Capitoline Hill, being more in advance of the Severus Arch towards the Forum, identical with the tribune of Republican times, which we know was removed by Julius Cæsar, for some political motive, from its former place in (or beside) the Comitium to a spot nearer the centre of the Forum. These, the oldest and most historic Rostra, present the form of a long rectilinear structure in massive and regularly laid blocks of lithoid tufa; and as its remains stand before us, we can identify them with the Rostra introduced in one of the small, feebly executed reliefs on the Arch of Constantine—the subject, that emperor addressing the people from this tribune amidst the festivities on occasion of his triumph over Maxentius. Along the road, with ancient pavement, passing through the centre of the Forum from north to south, stand seven ponderous brick structures, all of the same quadrangular form, and parallel with the elevated basement of the Phocas Column. It is evident that these must have been utilized, probably for dwellings, in the Middle Ages, as they are hollowed out, the inner mass of masonry being removed; and we may suppose they served originally for the support of memorial columns or colossal statues, so many of which were erected on this area even before the imperial period. Farther westward is another much lower basement of brick, lined with travertine, and evidently for a colossal statue—a most valuable discovery, for here we may recognise the place of the equestrian effigy of Domitian, so described by the courtly Statius (*Silvæ*, l. i., Carm. i.), that the sites of all the more conspicuous buildings adjacent to, and overlooking it, may be determined. We have thus a key in monumental form to almost the entire topography of Rome's Forum. Two other mediæval buildings, one a ponderous brick tower, the other a more considerable mansion or castle, have been exhumed at the northern and southern sides of this area; and both being unsightly incumbrances, one (the tower) has been since demolished, the other (the castle) for the greater part, though not entirely, swept away. Beneath that tower were found, weighed down and concealed, the most precious works of art yet yielded at any time by the Forum: two large marble panels with finely treated bas-reliefs, historic groups on one side, and on the other side, in each instance, the three animals, a bull, a ram, and a boar, victims at the Suovetaurilia sacrifice offered at each celebration of the general census, and also at certain other solemnities. The subjects of the historic reliefs, each with numerous figures, have been variously conjectured. I believe that the most plausible, indeed quite satisfactory, explanation is that advanced by Professor Henzen: namely, that both illustrate the public beneficence of Trajan, and are works of that emperor's time—the one, his edict, enthusiastically extolled, ordering provision from

the State treasury for all indigent children as well in Rome as in all the Italian municipia; the other, his remitting of all debts retrospectively due to the State, and the public act by which this clemency was declared, the burning of the tablets, on which such debts were registered, before the Emperor's eyes and on the Forum. That cremation is the intelligible subject of the relievo in question. Of the Emperor's figure remains nothing but parts of one leg, and of the chair where he is seated on the Rostrum. Mutilation has done most deplorable havoc with both the historic reliefs here before us, almost all the heads and hands being broken off, and as it seems through deliberate malice, though the three animals, decorated for sacrifice with fillets and garlands, are perfectly preserved on both these marbles. Another interesting feature in the historic scenes so well illustrated is the background of architecture to each group, enabling us to recognise at once the Forum Romanum and the principal temples on the Capitoline declivity; also the now lost Arch of Tiberius, here placed between the temples of Concordia and Saturn, though its actual site, we know, was lower down at the foot of that hill. A long front of arcades with pilasters, in each background, is probably intended for a lateral view of the Julian Basilica.

C. I. HEMANS.

NOTES ON ART.

The Berlin museums will probably soon acquire an importance proportioned to the station which Prussia is acquiring in Europe. When the gallery of painting which Schnikel planned and built at Berlin is enlarged there will no doubt be room for the exhibition of a number of canvasses now lying unheeded and unknown to the general public in the royal residences; and also for the display of new purchases that have been made in Italy and elsewhere. There are few countries so rich in examples of the French art of the seventeenth century as Prussia. The letters K. S. (Königliche Schlösser) in the catalogue of the Berlin Museum indicate the origin of many pieces which have already found their way out of the residences of the Hohenzollern into the national collection. We find under this head some delicate pieces by Mignard and Rigaud, religious compositions by Subleynas and Le Sueur, allegories by Poussin and Lairese, and powdered gallantries by Watteau and Lancret; but the number of works of these masters now on the walls of the Berlin gallery is as nothing to those still remaining in the various palaces once inhabited by kings and princes of the Prussian royal house, and it would make a French connoisseur's mouth water to find what treasures of Watteau and Lancret are concealed in mouldy apartments seldom visited by the royalties of our day. These treasures should be brought into the national gallery, if only for the sake of preservation. It would be easy to find a form of transfer which should preserve the ownership in the hands of the dynasty if it chose to keep a lien upon the property of the crown so as to distinguish it from the property of the nation. It ought not to be a matter of indifference to the Prussians any more than to lovers of art in general that masterpieces should be buried in country houses and subject to all the dangers of neglect. It is desirable on all accounts that these masterpieces should be collected, cared for, and displayed.

The funds at the disposal of the Prussian museums are small. Even now that Prussia is rich the sum placed at the disposal of the director, Count Usedom, is not more than £16,000 a year, and with this he is bound to keep up the galleries of painting, sculpture, casts, antiques, coins, engravings, ethnography, Egyptian antiquities, &c., &c., but even with these means much may be done. Something indeed has already been done creditable to the nation, though not perhaps of a kind to captivate the general public. Thus we hear that one of the fine Nicolas Poussins of the Sciarra collection at Rome has been transferred to Berlin. Some clever and characteristic landscapes of Andrea Schiavone, a fine portrait assigned to Moroni and Titian have been bought, and a Virgin and Child by an Italian realist of the fifteenth century; a picture of considerable force and depth as the work of a tempera painter will be exhibited. Lastly, the large and characteristic work of Signorelli, the "School of Pan," will attract the eye of the public. Signorelli was not an elegant painter; he cared little to delineate the delicate charms of female beauty which had such attractions for the Venetians

of the sixteenth century. Still less was he a colourist. His "School of Pan" is not distinguished from other works of the same master by more select form or greater brilliancy of tone; but it is characteristic because of the purity with which the shape of limbs and extremities in nude figures is rendered, the skill with which movement is rendered, and the boldness with which the surfaces are treated. In other departments the directors of the Berlin Museum have also shown activity. They have purchased a very remarkable Niello by Finiguerra, and some antiques and coins. They propose to complete a collection of photographs from prints, pictures, and works of a plastic and architectural character. In emulation of the scheme proposed by M. Thiers they hope to furnish their museum also with a collection of copies, and to increase the collection of casts especially with models discovered or discoverable in the classic territory of Greece.

Judging from a letter from an art-correspondent in Venice that appears in the *Beiblatt zur Zeitschrift für bildende Kunst*, the Venetian painters of the present day must at last have reached the bottom of the abyss of incapacity towards which they have been tending ever since Venetian painting fell from its glorious estate. "Painting," said a Venetian connoisseur the other day, "has become like medicine with us—a receipt—a mere receipt," and unfortunately it is not the right receipt. A permanent exhibition of the works of modern Venetian art is held in the Palazzo Mocenigo, where the visitor to Venice after he has studied the art of the fifteenth and sixteenth centuries may if he likes note what the nineteenth has brought forth. A few young Venetian painters, most of whom however have learnt in foreign schools, do not deserve to be ranked with the effete painters criticised in the *Beiblatt*. We presume they do not send their works to the permanent exhibition of impotence held in the Palazzo Mocenigo.

It is a source of real satisfaction to be able to announce that Mr. Castellani's antiquities, of which some account was given in our last number, have been purchased, and that they are now exhibited to the public in the Second Vase Room of the British Museum, with the exception of the bronze head, the terracotta sarcophagus, and the marble head of Hera, which for a better light are placed the first in the Bronze Room and the other two in the sculpture galleries.

Benjamin Vautier, a painter of the Düsseldorf school, has just finished a much admired picture whose subject reminds us of Faed. It represents a young countryman sitting by the sick-bed of his wife with his little baby daughter asleep in his arms.

In the *Zeitschrift für bildende Kunst* the editor, Dr. Lützow, reviews the "Frans Hals Gallerie," a series of etchings that is now in process of publication. We have alluded to this work before. The etchings are by W. Unger, who is already well known from his clever reproductions of the pictures of several of the minor galleries of Germany. Unger has a thoroughly congenial subject in the works of Frans Hals. He does not adequately represent the calm strength and depth of character in the great Italian portraits, and even Vandyck loses in his hands some of the Vandyck refinement; but the genial Hals suits him exactly, and the etchings from this master in his earlier series are nearly perfect in their fidelity. A little Dutch lady in state attire stands as frontispiece to Dr. Lützow's article. It is somewhat hard to decide whether she is old or young.

The current number of the *Gazette des Beaux-Arts* opens with the first part of a valuable article on Phœnician art by Ernest Renan. Unfortunately the most diligent research throws very little light on the art of the great maritime nation of the old world.—Henry Havard continues his notices of the paintings of the Dutch school exhibited in Amsterdam in 1872. His article is illustrated by a beautiful etching by Courtry, after Peter de Hooghe.—Next comes an account of the Belvedere Gallery at Vienna, with critiques on some of the paintings. The author reduces the thirty-five pictures ascribed to Titian in the catalogue to about half that number.—Paul Mantz contributes the second part of his article on the Rotham collection. It is accompanied by several good illustrations, the best being an

etching after Lancret's picture, "La Dame au Parasol."—The following article by René Ménard is devoted to the Favre collection. A good part of it is occupied with a highly eulogistic critique on Delacroix's "Two Foscari." Etchings from an "Interior" by Dupré, the "Ophelia" of Delacroix, and a beautiful "Return of the Flock" by Troyon illustrate the article.

An antique glass vase has been disinterred in the neighbourhood of Arles. It consists of two parts, one of common glass, the other, which is superimposed on it, of red glass curiously knotted. It bears the inscription *Divus maximianus Augustus*.

The death is announced of Carlo Arienti, one of the best known painters of the modern Italian school. He was director of the Académie des Beaux-Arts at Bologna.

On the 21st of March Vilhelm Nikolaj Marstrand died at Copenhagen. Marstrand was the most original and powerful painter that Danish art has produced. Born in 1810, he studied first under Eckersberg, and later in Rome was a friend and associate of, though much younger than, Thorwaldsen. His greatest works are the colossal frescoes in Roeskilde Cathedral.

New Publications.

BENNDORF, O. Die Metopen von Selinunt, mit Untersuchgn. über die Geschichte, die Topographie, und die Tempel von Selinunt. Berlin: Guttentag.

GROTE, Mrs. The Personal Life of George Grote. Murray.

NOTTEBOHM, G. Beethoven's Studien. 1. Bd. Beethoven's Unterricht bei J. Haydn, Albrechtsberger, und Salieri. Leipzig: Rieter-Biedermann.

POORTEN, A. Tournée artistique dans l'intérieur de la Russie. Bruxelles: Muquardt.

PUSCHKIN, A. S. Sammlung der verbotenen Gedichte. Russisch. Leipzig: Kasprowicz.

Philosophy and Physical Science.

History of German Philosophy. [*Geschichte der deutschen Philosophie.* Von Dr. Edward Zeller.] München. 1872.

THIS volume by the well-known author of the *History of Greek Philosophy* is one of a series of popular histories of German science published by the Munich Academy of Sciences. It may be doubted whether the plan of the series is not a mistake, though it is a natural mistake at a time when the idea of nationality fills so large a space in the German mind. Science is not a national product, especially in modern times, and there is considerable disadvantage in taking the contributions of any nation out of their place in the general sequence of discovery. And it might be feared that this disadvantage would affect philosophy, the most universal of sciences, more than any other. But in the present case, owing to the peculiar relation of Germany to the history of philosophy, it is not so. The Germans took scarcely any part in the earlier movement of speculation till towards the end of the seventeenth century. When Leibnitz looked for a "Philosophus Teutonicus" before his own time the only writer he could find worthy the name was the mystic Boehme, who had indeed the deep insight of a philosopher in the speculative problems suggested by the moral and religious life, but who was utterly devoid of any conception of scientific form or method. The reasons of this almost complete absence of philosophical thought among the people that afterwards proved itself the most speculative among European nations are well stated by Dr. Zeller. The scholastic philosophy was pre-eminently the philosophy of *Latin* Christianity, a philosophy of compromise, that started with the recognition of an absolute spiritual

authority in the Church, and sought only by the aid of Aristotelian logic to give formal development and system to the doctrines received from that authority. It was a philosophy altogether opposed to the main tendencies of the German spirit, which sought in Christianity not so much a rule of life and opinion as a satisfaction for the reason, or at least for the heart and conscience, of the individual. It is in the revolt against scholastic philosophy and theology that German thought first begins to show its power. Already in the beginning of the fourteenth century the bold mysticism and pantheism of Eckhart gave rise to a movement of the religious life which continued, though in a softened and subdued form of pietism, to keep up a protest against the dominant orthodoxy and ceremonialism till it culminated in the Lutheran Reformation. And this religious movement was parallel with a kindred movement in science. Paracelsus, who gave the first powerful impulse to the study of physics, was a German, so also were Erasmus, Reuchlin, and others of the most eminent of the revivers of learning. Yet the promise of this brilliant dawn was not for a long time fulfilled; the Reformation drew all the most powerful intellects of Germany first into the religious contest with Rome, and then into the political contest with Austria that grew out of it. And amid the miseries of the Thirty Years' War the interests of culture and science were thrust into the background. The theological and philosophical text books of Melancthon, in which reformed doctrines were combined with a mild and eclectic Aristotelianism, for the most part ruled the teaching of the universities, and in spite of a few foreign influences from Ramus or Descartes it was only in the end of the seventeenth century that the first great philosophic writer appeared in whom the native tendencies of Germany were exhibited. Leibnitz, in his idealism, in his comprehensiveness, in his effort to reconcile all previous philosophy by a higher principle, deserves himself far better than Boehme to be called "Philosophus Teutonicus." It is with him that the great movement of German speculation commences, and his influence is discernible in all its subsequent progress. Dr. Zeller, therefore, begins his more detailed account of the history of speculation with the Leibnitzian philosophy. The subsequent history also he naturally divides into two periods: the period from Leibnitz to Kant, and the period from Kant to the present time. Till the *Kritik of Pure Reason* was published Leibnitz ruled over German thought with scarcely a rival. Wolff simply systematized and popularized, or perhaps we should rather say vulgarized, Leibnitz. He changed a somewhat ill-organized, occasionally even fantastic, but always deeply speculative, philosophy of the reason into a neat logical and symmetrical system of the understanding. And after Wolff no powerful influence modified the course of thought until Kant broke away from the ruling dogmatic philosophy, and by his study of Hume and other English writers was led to open up an altogether new line of investigation. After this one break the continuity of the history of German speculation is not again interrupted by foreign influences. Scarcely any writer not German even took any notice of the idealistic movement of thought in Germany till it was completed in Hegel. After the time of Hegel Dr. Zeller recognizes no philosopher of anything like his importance. Isolated writers have, he thinks, made valuable contributions to our knowledge of special departments of thought, and especially to psychology, and the general advance of the sciences necessarily forces a reconsideration of many things in Hegel's philosophic criticism of science. The future philosophy must, he declares, "enter into a closer relation with science than it has hitherto done, and complete its too exclusive idealism by a sound realism." The book ends with these significant words: "The life of Germany

has in the last thirty years entered upon a new phase in which its political and economical labours have received an unexpected expansion, in which it has had to encounter new problems, and has attained to results of which formerly we could scarcely have ventured to dream. But as in this outward region everything depends upon this, that Germany should not by outward success be led to forget the spiritual and moral conditions that have secured it, so the future of German philosophy must depend upon the degree in which it succeeds in keeping its eyes alike open for the facts of nature and for their deeper inward connection, for the subjective and objective elements of conception, for natural causes and the ideal reasons of phenomena."

It is impossible within moderate limits to criticise in detail the execution of a work of such compass as this. We shall therefore only make a few general remarks upon its merits and defects.

1. As a whole the book is a specimen of the best kind of popular writing. There is, as Dr. Zeller says in his preface, a kind of popularity to which no history of philosophy can pretend without ceasing to be of any value. But that power of judicious selection, distinct arrangement, and clear yet accurate exposition which were shown by the author in his *History of Greek Philosophy* do not fail him in this slighter work. Though so much has to be compressed in it into so small a space it has none of the proverbial dryness of epitomes. With no less accuracy than the *Handbook* of Erdmann, it is far more readable. Some of the sketches, especially of writers of secondary importance, such as Hamann and Jacobi, have a vividness and suggestive force of expression such as can be only attained by one who is master of his subject, when he gathers the result of his wide knowledge and matured thought into a concentrated picture.

2. There is a certain disproportion visible between different parts of the book. The lesser lights of the Leibnitzian and Wolffian school are treated with more than sufficient detail; and on the other hand, towards the end there is an undue compression of material. The account of Hegel is perhaps the least satisfactory portion of the volume, and reads in parts almost like a table of contents.

3. In the first part of the history the author is specially successful in tracing the connection of the theories of Leibnitz and Wolff with the later German philosophy. He shows very clearly that the attempt of Leibnitz to reconcile opposite views never got beyond the conception of a somewhat artificial "harmony." His Monadism wavered between an extreme individualism in which God was merely a name for the external agreement of the Monads with each other, and a Pantheism like that of Spinoza, in which God was all and the Monads but modes of His attributes. Again, the psychological theory which he opposed to that of Locke, that all knowledge is developed from within, is irreconcilable with his admission of an essential distinction between our apprehension of the eternal truths of reason and our apprehension of empirical and contingent facts. From the first of these difficulties Wolff frees himself mainly by ignoring it, but in regard to the second he makes the latent dualism of the system still more evident by dividing every branch of philosophy into two parts, a rational and an empiric part. Kant's rejection of the Leibnitzian identification of sensation and thought was therefore not without a justification in Leibnitz and Wolff themselves. The clear, logical method of Wolff also did much to betray that which is really the weak point in the philosophy of Leibnitz and his predecessors of the Cartesian school, namely, that they never examined the character and origin of the metaphysical categories which they employed. The Wolffian philosophy is a pure philo-

sophy of analysis, and while it introduced distinctness and system into German speculation and freed it from the authority of scholastic tradition, on the other hand by its very definiteness it laid bare to the eye of Kant the assumptive and arbitrary character of its first principles. Kant's distinction of analytic and synthetic judgments *a priori* at once proved the delusiveness of this system of nominal definitions, showed that there was no real progress possible on such a method, and prepared the way for a more productive movement of thought.

4. The exposition of Kant is given with Dr. Zeller's usual clearness and accuracy. He has however repeated an old error about the meaning of the passage against idealism in the second edition of the *Kritik* (p. 772, Rosenkranz's edition): "We must," he says, "assume that there is a reality different from ourselves and corresponding to our sensations. Kant seeks to show this in opposition to Berkeley's idealism in the second edition of his *Kritik*, where he says that the empirically determined consciousness of our own existence proves the existence of objects outside of ourselves, for the change of our states in time can only become conscious in reference to something that is permanent. And as our existence in time already presupposes this permanent something it cannot be something in ourselves, but only a thing that is without us." In this statement there seem to be two errors, for the passage referred to is directed not against what Kant calls the dogmatic idealism of Berkeley, but against the problematic idealism of Descartes, and in the second place it does not assert the existence of a real thing, or "thing in itself" independent of our representations. Kant had previously in the *Æsthetic* (p. 46) asserted that external phenomena are real in the same sense as internal phenomena; and to confirm this he here attempts to show that we could have no apprehension of the phenomenal self, that is of the phenomena of the inner life given under the form of time as real, unless we had at the same time the apprehension of the phenomena of the external world given under the form of space as real; in other words he argues that the knowledge of ourselves as phenomena or objects of experience presupposes the knowledge of external things as phenomena or objects of experience. (Cf. *Kritik*, p. 778.)

5. Dr. Zeller remarks that the boldness and confidence which characterized German speculation in the period after Kant, has now given place to a hesitating, tentative, and critical spirit. The differences and disputes between the various sections of the last great school of philosophy seem to show that there are problems which its master had imperfectly considered; and the advance of science, as has already been mentioned, has made manifest the imperfection of Hegel's hurried idealistic criticism of science by revealing the incompleteness of the data upon which it went. Hence there has arisen among German students of philosophy, a desire to retrace the history and reconsider the logic of the whole idealistic movement of thought from its beginning in Kant. The productive period being ended, and its results seeming to be insufficient, it is natural to go back to the foundation and to examine what errors have been made in laying it. Dr. Zeller is one of the chief representatives of this historical and critical tendency; he is not a Kantian or a Hegelian, though he believes that Kant was the beginner of a new era in philosophy, and that Hegel only developed the results necessarily involved in the principles of Kant. He thinks that by a reconsideration of the work of Kant, especially in the light of a more advanced psychology, we may be able ultimately to arrive at an idealism of a sounder kind than the system of Hegel. This view need not here be criticised, as indeed Dr. Zeller only

imperfectly indicates how he would develop and apply it. We are afraid that its result would be a mere compromise, an eclectic dualism without principle or unity. And if, as we gather, it would base metaphysics on psychology, it would necessarily lead to the abandonment even of the essential principles of Kant. At present, however, we mention it merely to explain the critical and tentative attitude which Dr. Zeller adopts in the latter part of his history. By this also we may explain why it is that he seems so much more successful in analyzing and criticizing the secondary than the primary writers of this period. His review of Schopenhauer, for instance, is considering its limits wonderfully complete, and in its result almost crushing; while his remarks on Fichte, Schelling, and Hegel are somewhat fragmentary and partial, rather affecting isolated difficulties and special results than the general principles of their philosophy.

EDWARD CAIRD.

Old-Fashioned Ethics and Common-Sense Metaphysics, W. T. Thornton. Macmillan and Co. 1873.

IN his work on Labour Mr. Thornton assailed two assumptions, generally accepted by economists, that there exists a definite wages fund, and that the price of labour and other things depends upon supply and demand. It is too soon to say whether his success will result in a modification of the terms of political economy, or only in leading the public to make a slightly larger abatement from the results of economists; but upon the whole the book was a success. The author's present work must be pronounced a failure, but it is not a failure of a discreditable kind. A good man struggling with adversity is, we all know, an edifying spectacle, and an able man out of his depth is an instructive one, especially when the victim has ability enough to keep his head above water, and to look about him from first to last. *Old-fashioned Ethics and Common-sense Metaphysics* is an attack on the prevailing tendencies of cultivated opinion about as acute and about as vigorous as the late Mr. Buckle's attack on the prevailing belief on the subject of Providence, or Professor Tyndall's attack on the prevailing belief of pious people on the subject of Prayer. Mr. Thornton does not succeed any better than Mr. Buckle or Professor Tyndall in understanding what he attacks, though in his case, at any rate, the failure is not due to want of goodwill and painstaking. Taken by themselves, the account of utilitarianism and that of Darwinism might pass muster as long as the writer keeps to exposition, but when he comes to criticism it is plain that he does not understand the body of postulates which lie behind what he describes and criticises.

Utilitarians are used to being misunderstood; perhaps we might add that they are used to misunderstanding their critics. Perhaps the reciprocal misunderstanding may be traced up to the fact that Bentham was a jurist, and occupied himself much more with what is "mutable and therefore improvable in morality" than with what is permanent, and so came to imagine that all morality rested on the safe and powerful instrument he had devised for revising the legal and moral code of eighteenth century Toryism. Mr. Thornton allows utilitarians the benefit of a classification of pleasures, which, considering that the majority are incapable of the highest, is a very large concession for an opponent to make; his criticism consists mainly of examples of the costliness of virtue, and of a fairly successful attempt to show, by a series of extreme and imaginary cases, that utilitarianism would justify what existing morality condemns, and condemn what existing morality recognizes as virtuous. Of course utilitarians would take refuge from such criticism in the assertion of the importance of general maxims; and if

pressed to admit that this assertion itself is an argument against weakening the authority of general maxims by revising them, they would find plenty of room for retaliation at the expense of Mr. Thornton's doctrine of abstract indefeasible rights, which is connected with some of the crudest theorizing about the social contract which has ever been printed.

In the essay on History's Scientific Pretensions the author concedes Mr. Buckle's premises with some reservations and distinctions to which he attaches an incomprehensible importance, and attacks his conclusions, or rather some of their corollaries, with incomprehensible earnestness.

The essay on Hume is decidedly better, though the theory of a causation is treated as an error of detail largely due to the fact that Hume had omitted to notice that we have ideas of ideas, as well as of impressions. Such a criticism is more than inadequate, but the writer takes the obvious objections with great spirit, and insists effectively enough on the dislocation of the familiar indispensable machinery of thought which results from Hume's analysis, and on the contrast between the essay on Causation and that on Miracles, though here again we feel that the writer very much under-estimates the impressiveness of what is coming to be known of the complex order of the world. But very much his best point is that after all Hume was a sceptic, as he called himself, and therefore is hardly to be taken seriously; that his method is not meant to lead to conviction, and that it is abused when people try to make it an instrument for imposing very unwelcome convictions upon Mr. Thornton.

It will be convenient to speak of the three remaining essays (on Huxleyism, Recent Phases of Scientific Atheism, and Limits of Demonstrable Theism) together. Mr. Thornton makes Descartes the starting-point of speculation, but he repudiates both Berkeley's idealism and Huxley's quasi-materialism, and by the aid of the assumption that it is impossible for death to give birth to life he not only demolishes (to his own satisfaction) the essay on Protoplasm, but builds up a curious theory of spiritualism, according to which all matter is mediately or immediately the avatar of some intelligence not necessarily the highest. This reminds us both of the theosophy of the Cabbala and of Schopenhauer's and Hartmann's—theories of a will pervading nature which only attains to consciousness in man; fantastic as it sounds, it is hardly so empty as Berkeley's singularly ingenious reduction of *esse* into *percipi*. But it hardly harmonizes so well as the writer supposes with the familiar argument from design which he still finds as convincing as Paley found it, and as a large number of intelligent men will continue to find it as long as the most advanced school of speculation shuts itself up in the conviction that the argument is not worth refuting. It was not to be expected that a theist should resist the temptation to quote the Religion of Humanity as a specimen of *la credulité des incrédules*; it is a more decisive specimen at any rate than the rejection of Mr. Thornton's aphorism about the impossibility of death giving birth to life. The "limits of demonstrable theism" are of course stretched to the utmost; on the writer's principle it is impossible for the creature not only to be but to imagine anything higher than the Creator, and in this way we have a standard of perfection which makes the origin and continuance of evil a serious difficulty. This is discussed with more vigour than poetry in several hundred lines of *terza rima*. The solution which the writer finds wholly satisfactory is simply the *naïve* dualism of the Zenda-vesta, which is reached after an exhaustive dissection of the subterfuges of ordinary theists. After all it is not the least plausible of the forms of optimism, though it may be doubted

whether it would stand the criticism of Mr. Browning's Caliban. Its real importance is not of a kind to be affected by criticism, and the interest of the book does not depend upon the value of the views it contains; nor upon the not very remote possibility that when centuries enough have passed they may seem as respectable as Plutarch's. What is really interesting and important, if not exactly satisfactory, is that an undeniably able man with a shrewd, robust, and candid intellect should have come to hold and preach such opinions, and that there should be no recognized authority capable of setting him right. After all it is possible to make unanswerable objections to a theory without understanding it, and therefore Mr. Thornton's book may be significant as one symptom among many that if the traditional intellectual synthesis be finally overthrown it will be succeeded by a period of intellectual anarchy whose duration is hard to calculate. G. A. SIMCOX.

JOHN STUART MILL.

WE have lost in John Stuart Mill the best philosophical writer—if not the greatest philosopher—whom England has produced since Hume: and perhaps the most influential teacher of thought, if we consider the variety as well as the intensity of his influence, that this country has ever seen.

Originality of the highest kind he only showed in one department—the theory of method and evidence; but the unequalled mastery of method which his logical speculations developed, his patient tenacity and comprehensiveness of study, his rare gifts of exposition and discussion, and the controlled fervour of his intellectual and social enthusiasm enabled him to do in other departments work equally important in forming the minds of his contemporaries. Indeed some of his other work, as e.g. his *Representative Government*, has more finished persuasiveness than his treatise on logic, just because it shows so little travail of new thought: its merit lies in arranging in a lucid and systematic form the best results of current debate, with a careful and judicious selection of points, and a grasp at once easy and close of all the fundamental notions. In political economy, again, the amount of his original work is not great; it is almost entirely contained in a small volume of *Essays on Unsettled Questions in Political Economy*, published thirty years ago, and cannot be compared for importance with the speculations of Ricardo or even Malthus. Still the services which he rendered to the science of plutology were such as probably no other man could have rendered, and may be fairly regarded as inferior to those of no economic teacher since Adam Smith. These services were chiefly of two kinds. In the first place he brought a higher degree of philosophical reflection to bear upon his exposition of the common doctrines of the science, and attained a less imperfect consciousness of the assumptions included in his premises and the limits to the applicability of his conclusion than his predecessors had shown; avoiding at the same time the confused and sterile logomachies in which the principles of the study had been involved by inexperienced dialecticians. And secondly he was impelled, partly by his keen human sympathies and strong practical interests, partly by the wider conceptions of the study of social phenomena which he had formed under the powerful influence of Comte, to restore to political economy that natural connexion with the general science of society and art of government which it had almost lost in the hands of Adam Smith's successors.

A somewhat similar judgment may be passed upon his contributions to metaphysics, except that he never attempted a systematic exposition of metaphysical doctrine. It was characteristic of his philosophic temper that neither for denial nor affirmation would he venture into regions of speculation where he could not make his footing sure, however tempting and well-trodden the road might be. Nevertheless what he did publish on the subject, though not extensive in amount (if we except purely critical matter) nor requiring much effort of independent thought, is yet valuable and important. It fell to him to sum up, and that with sufficient fulness, though as it

were incidentally, the results of English empiricism in its positive phase; for the system which Locke initiated and to which Hume gave consistency and precision while developing it to purely sceptical conclusions, assumed in Mill's mind the attitude of cautiously constructive dogmatism. The plan of construction had been laid down by Brown and James Mill, and the elaboration of its details has been carried on in our time by other thinkers: what J. S. Mill did was to formulate the method with peculiar distinctness and estimate with caution and candour the extent of the philosophical beliefs that could be attained by it. The negative side of this estimate is given in different parts of the *Logic*; its positive side in a few admirably written chapters of the *Examination of Hamilton*.

It was however in logic or methodology that Mill's highest gifts found their proper sphere. The exact value of his theory of reasoning and proof we are not now concerned to appraise; but there is no doubt of its novelty and interest. We may feel too that it was a task especially worthy of an English thinker to take up the problem at which Bacon laboured and attempt a fresh solution of it with the data supplied by the triumphs of modern science, while at the same time composing the quarrel between the old Organon and the new, which had practically remained open for two centuries. Since modern science and empirical philosophy revolted from the Aristotelian logic no reconciliation had been attempted; and the single important change that logical teaching had undergone in the adoption, after Kant, of the purely formal conception of the study had only made the breach wider. English metaphysic, from Locke to Brown, had remained contemptuous of logic, and scientific specialists had remained contentedly ignorant of it. It required a rare combination of philosophic insight and comprehensive scientific culture even to conceive definitely the task which Mill set himself, and which he at least so far achieved as to revolutionize the study of logic in England.

It is somewhat singular, considering the extent to which Mill's name is commonly identified with utilitarian ethics, that his treatise on this subject should show so little of his usual skill. The sentiment that pervades it is attractive; but the book is hastily put together, and the system seems incompletely reasoned and even incoherently expounded. On the other hand his essays on *Liberty* and *The Subjection of Women*, though somewhat less close and careful in argument than his larger works, have great literary excellence, and were perhaps the most effective of his writings—perhaps because the intense enthusiasm for human progress which the studied composure of his philosophical style partly conceals was allowed freer expression in these popular essays. This is not the place to speak of Mill's public career; but our notice would be incomplete if we did not dwell for a moment on the simple and noble passion for the universal realization of a high ideal of human well-being which burns like a hidden flame at the core of his social philosophy. It is this enthusiasm, controlled as it is by a severe reverence for facts and a perfect philosophical sincerity, which more even than his dialectical gifts has given him so large a share in forming the thought of the present generation; and it is this especially that now makes it difficult for those who have so long looked up to him as their teacher to estimate calmly how much the world is poorer by his loss. H. SIDGWICK.

Notes on Scientific Work.

Anthropology.

Ancient Greek Crania.—An important addition has been made to the as yet very small number of Greek crania by the discovery of two more in a perfect state of preservation at Athens. The first is that of a woman named Glykera, as we learn from the tombstone, which was found as it had been placed by affectionate survivors. In the tomb beside the skeleton were two small painted vases, and on the tombstone was sculptured a parting scene of no great artistic merit. The second is that of an old man. It was found, 17th May, 1871, in a tomb, lying from west to east, and containing, besides, about thirty vases, a silver fibula, two gold rings, a gold plate, and some articles of bronze, but no inscription from which we might gather any knowledge of its tenant. The vases are of what is called the earliest style, that is the style which

prevailed in Greece previous to the introduction of the human figure as a subject of decoration in vase painting. Supposing the transition from the earlier to the later style of painting to have taken place shortly after the death of this old man, and assuming his cranium to be a normal cranium of his nationality and time, it is interesting to see how what has always been a remarkable feature in the earliest vases on which the human figure occurs—the smallness of the cranium—comes to be justified as a correct observation of nature. Of both crania, indeed, though that of Glykera cannot be regarded as of an early date, Virchow (who gives elaborate measurements and descriptions of them in the *Zeitschrift für Ethnologie*, Berlin, 1872, iv., p. 147) remarks that their capacity is much under the medium of modern civilized people and rather resembles that of savage races. At the same time the form of both is very beautiful, the vaulting of the male head being particularly fine. In occipital development it is much inferior to that of Glykera. But in spite of this difference the similarity between them is so great in the formation of the brow and face that there can be little doubt of both persons having been types of the same race.

Excavations at Mzchet.—The new number of the *Zeitschrift für Ethnologie* (Berlin, 1872, iv., p. 231) gives a continuation of the report on the excavations among the ancient tombs at Mzchet, near Tiflis, noticed in the *Academy* (vol. iv., 151). Having in the former part of his report described the natural features of the district and the construction of the tombs which he opened, and having discussed the method of burial and the few historical notices of the population in ancient times, the excavator now gives first a detailed account of the objects of art which he found, and secondly a number of startling conjectures in the matter of the religion of the old Iberians settled in that country. The articles found by him are (1) five engraved gems, of which the first is an onyx and bears on one side a figure of Victory and on the reverse an inscription, HXAPIC, which he interprets, as we think very freely, Icarus. The second an onyx set in a silver ring, has a figure of Priapus. The third is of lapis lazuli, and has the figure of an ass. The fourth and fifth are of onyx, and have, the one a figure of a hare, the other two ears of corn. The last three are set in silver. (2) A number of small glass bottles, or lacrymatories as they are called, which the excavator, to confirm his opinion that Herakles was one of the gods of the Iberians, describes as more or less resembling in shape the club of the Greek hero. (3) Bronze bracelets, hair-pins, and ear-rings ornamented with pearls, gold, and precious stones, bronze finger-rings, one being in the form of a key, and small bells, but no bronze weapons. Indeed the total absence of weapons, of whatever material, is one of the most striking phenomena in these excavations. (4) A large number of objects in iron, very much corroded, such as fibulae and hair-pins, to which are frequently added ornaments in gold, silver, pearl, or bronze. (5) Gold and silver fibulae, ear-rings, and finger-rings, set with stones and pearls, the various materials employed being emerald, beryl, hyacinth, pyrope (frequent), common garnet (rare), onyx, sardonyx, carnelian, chalcedony, agate, jasper, opal (rare), lapis lazuli, malachite, steatite, and sphærosiderite. (6) An onyx, supposed to have been used in the game of draughts (*ludus latrunculorum*), and a number of *astragali* and other bones, which from their frequency in the tombs of children are also thought to have been used as playthings. (7) A few specimens of pottery of a very rude kind, and apparently without ornament, beyond that of glaze. While thankful for these facts we must decline to accept conclusions arrived at in the following manner (p. 235): The pin of these fibulae has the form of a dagger or cross. In the pin lies the symbolical meaning of the fibula. The cross is the symbol of Ammon, the source of divine life. It is also equivalent to the hammer of Hephaestus, and therefore Hephaestus was a god of the ancient Iberians. As fibulae of this same pattern are found all over Europe, the worship of the Greek god must, if such evidence be sufficient, have been very widespread. We have already noticed his identification of the glass bottles as symbols of Herakles, whom he believes to have been the Iberian war god. The process by which Hermes, Dionysos, Astarte, and Priapus obtain each a place in the Iberian Olympus is equally instructive if much more difficult to follow.

Canopus Jars.—Some astonishment was caused by the discovery in North Germany of one of those vases familiar in ancient Egypt, fashioned in the shape of a human face, and named after Canopus. It was found to be ornamented with certain unintelligible figures or signs, which Professor Georg Ebers, of Leipzig (*Zeitschrift für Ethnologie*, 1872, iv., p. 90), now explains as imitations of hieroglyphics such as occur on genuine Canopic vases. His conclusion is that an Egyptian vase of this kind had found its way so far North in the course of Roman commerce, and been imitated by a native potter.

Roman Tombs in Mecklenburg.—Another, now the seventh, Roman tomb has been discovered in Mecklenburg, containing a skeleton in perfect preservation and over a dozen articles of pure Roman antiquity.

Ancient Indian Carving.—In the *Bulletin of the Essex Institute*, iv., No. 11, F. W. Putnam describes a curious carving in soft slate which was found with arrowheads of white quartz at Turkey Hill, Ipswich, Mass. It is probably a neck ornament, and the character of the carving conveys the idea that the instrument by which it was pro-

duced was of rough stone. It is about two and a half inches long, and represents a fish; the caudal fin is perforated, probably for the purpose of suspension. The dorsal fin points the wrong way, and is notched along the upper edge to indicate the fin rays. The carving is undoubtedly of Indian manufacture, and was probably worn as a "medicine." A drawing representing the natural size accompanies the paper.

Geography.

African Exploration.—The mission of Dr. Nachtigal from the Emperor of Germany to the Sultan of Bornu, a country lying to the south-west of Lake Chad, and the discoveries made by this traveller in the previously almost unknown region of Tibesti, in the centre of the Eastern Sahara, have already been noticed in the *Academy*. After a long silence the news has reached Gotha that Dr. Nachtigal arrived at Kuka, the capital of Bornu, in July, 1870, and fulfilled his trust by making over the presents of the Emperor William to the Sultan. Dr. Nachtigal has since undertaken a series of explorations branching from this central point, and in 1871 made a most important journey, full of interest in respect to geography and natural history, visiting the countries of Kanem, Egai (Egè), Bodele (Bâtele), and Bôrgu or Bûrku, lying north-eastward of Lake Chad and between that lake and the country of Tibesti which Dr. Nachtigal had formerly explored. With the exception of Kanem, which was visited by Dr. Barth in his journeys of 1850-55, these border countries of the Soudan and the Eastern Sahara have hitherto been known only by report. In this journey Dr. Nachtigal made the very valuable discovery that the river named the Bahr-el-Ghazal (which is not to be confounded with the tributary of the Nile of the same name, the basin of which has recently been traversed by Dr. Schweinfurth) flows out of Lake Chad for 320 miles to north-eastward through an extensive and fertile valley in which part of the country Bôrgu lies, at a still lower level than the region round Lake Chad (830 feet above the sea). In Northern Bôrgu Dr. Nachtigal found a range of mountains, believed to extend from Tibesti to Darfur, of great elevation, one of the passes being not less than 7,878 feet above the sea. In February, 1872, the date of his last letter, he purposed to make a new excursion to the country of Bagirmi, south-east of the Chad, respecting which the whole of our information is derived from Dr. Barth's journey to its capital, Messena. It will be seen that Dr. Nachtigal's travels have already opened out a vast region of the Eastern Sahara. No mountains approaching the altitude of those which he has found in Bôrgu have hitherto been discovered in any part of the Sahara region west of the Nile or between the Soudan and the Atlas range. His determination of an outflowing river from Lake Chad is also of the highest interest in its bearing upon a contested point of physical geography—whether all lakes without an outlet are necessarily salt or brackish. Lake Chad, the waters of which are certainly fresh and potable, has been held up as the great exception to this rule, and the equilibrium has been believed to be maintained by great evaporation alone. Dr. Nachtigal's discovery, however, places Lake Chad precisely on a parallel with the corresponding Lake N'gami in the southern area of African continental drainage, which overflows periodically by the Zouga, and with Lake Titicaca in the Bolivian highland, discharging its surplus waters to the Pampa Aullagas lake by the Desaguadero.

The last part of the *Zeitschrift der Gesellschaft für Erdkunde zu Berlin*, viii., Heft 1, 71, contains an important paper by F. Marthe on Russian reconnaissance of the country east of the Caspian Sea. He describes in detail each possible route to Khiva as regards length and water supply, of which abundant statistics are given. The paper is illustrated by a map prepared by H. Kiepert from the observations of the Russian Military Survey.

Chemistry.

The Decomposition of Salts.—Twenty years ago Rose studied the action of alkaline carbonates in solution on solutions of metallic salts. He found, in the case of powerful bases like the oxides of barium and silver, that pure carbonates were formed and, when weak bases were employed, that water played the part of an acid in expelling an equivalent amount of carbonic acid so that the precipitate consisted of a compound of a carbonate and a hydrate. With very weak bases carbonate alone was formed. Of late this subject has been further investigated by Joulin (*Comp. rend.* lxxvi., 558), who has determined the effect of varying the degree of dilution of solution and the relative amount of material taken. He selected carbonate of soda and a salt of manganese for his experiments. At ordinary temperatures, with equivalent quantities of the salts, and with an equal degree of dilution of each solution, but with increasing dilution as regards the quantity of salt used, carbonate of manganese alone is for a long time deposited; when however the solutions become more dilute than 1 : 200 a mixture of carbonate and sesquioxide of manganese is deposited, the filtrate containing bicarbonate of soda. When the carbonate is in excess the amount of oxide increases, even in very concentrated solutions, the quantity increasing with that of the carbonate. When the salt of the metal is in excess the concentrated solutions throw down pure carbonate; after a certain degree of dilution is

attained it becomes mixed with a quantity of oxide, and this increases as the solutions are made more dilute. When the salts act on each other through a membrane the same changes ensue. At 0° the quantity of oxide formed is less than at ordinary temperatures even when a considerable excess of carbonate is added. At 100°, on the other hand, the action of equivalent on equivalent is attended by the formation of a considerable amount of oxide and three equivalents of the metallic salt have to be taken to cause the precipitation of pure carbonite. The salts of silver, copper and mercury exhibit the same phenomena. As regards the rate of change with a dilution of 1 : 10 it was found that 94 per cent. of the carbonate of soda underwent decomposition at once or, more strictly, in the first five minutes; with a dilution of 1 : 8,000 only 11.97 per cent. was decomposed in that time. The addition of some sulphate of soda, the product of the decomposition, to the two solutions before they are mixed causes still further retardation of the decomposition, especially by increasing dilution. In a solution of one part of carbonate of soda in 1,000 parts of water to which had been added in equivalent proportion manganese solution of the same degree of dilution 60.27 per cent. of carbonate underwent immediate decomposition, 78.85 per cent. by the end of one day, 79.88 per cent. after two days, 86.56 after four days, 87.23 after seven days, 92.67 per cent. after fifteen days, 94.90 per cent. after thirty days. An excess of one or other salt considerably retards this action, and if it amount to 50 or 75 equivalents may impede the decomposition during twenty-four hours. These results are of great value in their bearing on accurate chemical analysis.

The Aerolite of Shergotty.—This meteorite, which fell on the 25th August, 1865, at 9 a.m., and of which a short account was given in the *Academy*, ii., 540, has recently been examined by Prof. Tschermak, of Vienna (*Jahrbuch für Mineralogie*, 1872, No. 7, 733). The fracture of this stone is distinctly granular, the grains being of nearly equal magnitude. The eye is able to distinguish two minerals, one of a bright brown colour and with very distinct cleavage; the other transparent, and with a strong vitreous lustre. Further microscopic and chemical examination led to the detection of five constituent minerals. An augitic mineral forms the chief mass of the stone: it has a greyish-brown colour, and exhibits double refraction with slight pleochroism. The cleavages and optical characters would suggest its being classed with diopside; the analysis given below, however, shows that it cannot be regarded as a member of the augite group:—

Silicic acid	52.3
Alumina	0.2
Iron protoxide	23.1
Magnesia	14.2
Lime	10.4
100.2	

A second constituent of this meteorite consists of colourless granules with vitreous lustre and conchoidal fracture, which proved to be distorted octahedra. They have a hardness equal to 6, and possess the following composition:—

Silicic acid	56.3
Alumina	25.7
Lime	11.6
Soda	5.1
Potash	1.3
100.0	

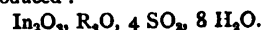
This new species has received the name of *Maskelynite*. The remaining minerals are a yellow silicate, probably bronzite, magnetite, and magnetic pyrites. In its mineral and chemical characters the stone of Shergotty resembles the meteorites of Stannern, Juvenas, Jonzac, and Petersburg, which as a class are widely separated from the greater number of the aerolites.

Thermo-chemical Researches.—The paper of Thomsen's on this subject is continued in *Pogg. Ann.*, 1873, No. 3, 368. In his examination of the phenomena attending the combination of carbon and hydrogen he has observed that the formation of acetylene from carbon and hydrogen is attended by a considerable absorption of heat. The formation of ethylene from acetylene, by combination with two more atoms of hydrogen, is accompanied by a divengement of heat, about 44,000°. The formation of marsh gas from ethylene, by further combination with four more atoms of hydrogen, is likewise attended by a development of heat of 51,720°. The decomposition of ethylene into marsh gas and carbon is accompanied by an evolution of heat; if the carbon separates as graphite it amounts to 31,310°. The author asks, How shall an explanation be sought for the remarkable inactivity which carbon displays towards hydrogen except at the very highest temperature, although after it has combined with it to form acetylene the affinity of hydrogen appears to be unsatisfied, so that further quantities of hydrogen readily combine with acetylene, and a development of heat is a consequence of the action. The conclusion Thomsen has arrived at is that carbon, whether in the form of charcoal, graphite, or diamond, exists in an inactive or passive condition, from which it must first be educed before it can enter into combination with other elementary substances, and that an expenditure of force is necessary to effect the conversion of carbon from this passive condition into that exhibited

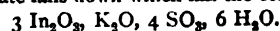
by other elementary bodies. The magnitude of this expenditure has not yet been exactly determined; but it appears to be about 7,000° for each atom of carbon. The fact of the rapid increase of the specific heat of carbon with rising temperatures, established by Weber (see the *Academy*, iii., 173), supports the assumption that carbon, before it can form compounds, must undergo a considerable change in its molecular condition.

The Iodine Spring in Java.—E. Reichardt has published an analysis (*Chem. Centralblatt*, 1873, No. 12, 182) of the mineral water of Genock Watoe, in Java, which contains iodine and is used in the treatment of diseases. It has a slightly alkaline taste and contains little particles in suspension, amounting to 0.0029 per cent., which readily take fire. The water strikes a blue colour with starch, especially after the addition of nitrous acid, and the presence of a considerable amount of iodine is indicated. The specific gravity of the water is 1.0198, and 1,000 cc contain 2.6669 grammes of solid substance, 0.0119 gramme of which is iodine. The existence of iodine in the free state in mineral waters which have been preserved for a long time has been noticed in other instances, and ascribed to the action of carbonic acid or the decomposition of iodide of ammonium.

Indium.—Roessler records in the *Jour. Prakt. Chem.*, 1873, No. 1, 12, the results of some experiments on the preparation of double salts of this metal. Its specific heat led Bunsen to correct the atomic weight of indium in consequence of which the oxide became In_2O_3 . With the view of determining whether this compound resembles other sesquioxides in forming alums Roessler attempted their preparation. The ammonium alum is easily formed, and when dried in air contains the 24 atoms of water. If however the salt be pressed and dried at 100° it loses with considerable ease six atoms of the water of crystallization. The crystals are octahedra with the faces of the cube strongly developed. The author was unable to prepare the potassium or sodium alum, salts of the following formula being produced:



By boiling a solution of this potassium salt for a long time a white pulverulent precipitate falls down which has the composition:



It is quite insoluble in water, but is readily taken up by hydrochloric acid.

The Meteorites of Montlivault and Beuste.—M. Daubrée has recently acquired for the Paris collection two meteorites that fell some time ago in France, but which have hitherto escaped notice, and are only now placed on record (*Der Naturforscher*, 1873, No. 17, 167). One fell at Montlivault, in the Department Loir et Cher, on the 22nd July, 1838. It weighs 510 grammes and is in the form of a three-sided pyramid. It is finely granular and consists chiefly of olivine and augite, in which grains of nickeliferous iron and magnetic pyrites are enclosed. It belongs to the group to which the name of leucite has been given. The other stone fell at Beuste, Basses Pyrénées, in May, 1859. Two pieces were found lying about 700 metres apart; one weighs 1.4 kilogrammes, the other, weighing 420 grammes, was driven into the ground to a depth of 50 centimetres. The black crust has a thickness of from 0.4 to 0.5 of a millimetre and the specific gravity of the stone itself is 3.53. It is a member of the Chantonite group and most nearly resembles the Pultusk meteorites. The grey very compact mass of the stone is penetrated in every direction by a mineral in black veins which anastomose and exhibit irregular ramifications.

Electrical Discharge through Carbonic Acid and Marsh Gas.—A. and P. Thenard have examined the effect of the silent discharge of electricity through a mixture of equal volumes of these gases (*Der Naturforscher*, 1873, No. 17, 168). After the lapse of ten minutes the condensation of the mixture became apparent, and in six hours it was complete. When the supply of gases was renewed the condensation continued and became more rapid. The product is a transparent viscous fluid which adheres to the sides of the vessel and after some time assumes a light amber colour. They have not yet produced sufficient quantity of the material to determine its composition. When a series of sparks is sent through the mixture a different result is noticed. In one hour the volume of the gaseous mixture is doubled and a considerable amount of carbon deposited. A. Thenard had previously ascertained that sparks split up carbonic acid into carbonic oxide and ozonized oxygen.

New Publications.

- AGASSIZ, A. The History of Ba anoglossus and Tornaria. Cambridge (M. ss.)
 BANES, J. R. Notices sur les grandes formations géologiques des Alpes de la Maurienne. Paris: Savy.
 BARRAL, J. Une visite à l'institut agricole de Beauvais. Paris: G. Masson.
 BECQUEREL, C. Mémoire sur l'influence de la pression dans les phénomènes d'endosmose et d'exosmose et sur les actions lentes. Paris: Firmin Didot.

- BRENCHLEY, J. L. Jottings during the Cruise of H.M.S. Curaçoa among the South Sea Islands in 1865. Longmans.
- BRUHNS, C. und HIRSCH, A. Bericht ueber die Verhandlungen der vom 21 bis 30 September, 1871, in Wien abgehaltenen dritten allgemeinen Conferenz der Europäischen Gradmessung. Berlin: Reimer.
- CLAUSIUS, R. Die Potentialfunction und das Potential. 2^{te} vermehrte Auflage. Leipzig: Barth.
- DE GUBERNATIS, A. Zoological Mythology; or, the Legends of Animals. 2 Vols. Trübner.
- DE SAINT-MARTIN, V. L'Année géographique. 11^e année. Paris: Hachette.
- FOSCOLO, G. Compendio di algebra superiore. Torino: Arnoldi.
- GEINITZ, H. B. Das Elbthalgebirge in Sachsen. Cassel: Fischer.
- GERDING, T. Die allgemeinen Grundlehren des wissenschaftlich-chemischen Lehrgebäudes, mit besonderer Rücksicht auf Physik und Stöchiometrie, oder die Theoreme der physikalischen, reinen, und mathematischen Chemie. Wiesbaden: Killinger.
- GILL, T. Arrangement of the Families of Mammals. (From the Smithsonian Miscell. Collections.) Washington.
- GISTEL, J. X. Carolus Linnaeus. Ein Lebensbild. Sauerländer.
- HORNER, P. Reisen in Zanguebar in den Jahren 1867-1870. Regensburg: Manz.
- JACQUOT, M. E. Description géologique, minéralogique, et agronomique du département du Gers. Paris: Imp. nationale.
- JENKIN, F. Electricity and Magnetism. Longmans.
- KNEELAND, S. The Wonders of the Yosemite Valley and of California. Boston.
- KOENIGSBERGER, L. Vorlesungen ueber die Theorie der elliptischen Funktionen. Leipzig: Teubner.
- KREBS, W. Einleitung in die theoretische Wärmelehre mit besonderer Berücksichtigung der mechanischen Wärmetheorie. Leipzig: Teubner.
- LEHMANN, R. Die lebenden Schnecken und Muscheln der Umgegend Stettins und in Pommern. Cassel: Fischer.
- LUNDBERG, F. Bidrag till Öfersigt af svriges ichtyologiska literatur. Stockholm.
- MAYNARD, C. J. The Birds of Florida: containing original descriptions of upwards of 250 species. Salem (Mass.)
- MAYR, J. G. Neueste Übersichts und Eisenbahn-Karte des deutschen Reiche: für das Jahr 1873. München: Rieger.
- NYSTROM, J. W. On Force of Falling Bodies and Dynamics of Matter. New York.
- PAETEL, F. Catalog der Conchylien Sammlung. Berlin: Paetel.
- RAGONA, D. Relazione tra le variazioni diurne della elettricità atmosferica a ciel sereno a quelle del barometro. Modena: Gaddi.
- SCHRAMM, H. Die allgemeine Bewegung der Materie als Grundsache aller Naturerscheinungen. Wien: Braumüller.
- SOLBRIG, A. Ueber die feinere Structur der Nerven-elemente bei der Gasteropoden. Leipzig: Engelmann.
- STAHL, H. Ueber die Massfunctionen der analytischen Geometrie. Berlin: Calvary.
- THOMAE, J. Ebene geometrische Gebilde 1 und 2 Ordnung vom Standpunkte der Geometrie der Lage. Halle: Nebert.
- TILLO, A. Terrestrial Magnetism of the Country of Orenburg (1830-1870). Leipzig: Voss.
- VON HENGLIN, M. T. Ornithologie Nordost-Afrika's. 26-35 Lief. Casse: Fisc. er.
- WEST, G. Statistique des volumes des équivalents chimiques et d'autres données relatives à leurs propriétés physiques. Paris: G. Masson.
- WEYRAUCH, J. Allgemeine Theorie und Berechnung der kontinuierlichen und einfachen Träger. Leipzig: Teubner.

Philology.

- Coniectanea Critica* ad C. Lucili Decadem Primam, Scripsit C. M. Francken. Amsterdam: Van der Post. 1869.
- Coniectanea Critica* ad C. Lucili Decadem Secundam et Tertiam, Scripsit C. M. Francken. Amsterdam: Van der Post. 1871.
- C. Lucilli Saturarum Reliquiae*. Emendavit et adnotavit Lucianus Müller. Accedunt Acci (praeter Scaenica) et Suci Carminum reliquiae. Leipzig: Teubner. 1872.

THESE two works on the great satirist of Republican Rome are both written by two friends, and are both interesting. M. Francken's work, though edited by the Dutch Royal Academy of Studies, and in quarto, is the smaller and in most senses less important of the two: it contains indeed only 158 pages, and often does barely more than quote the words of the fragments; on the other hand the discussions on particular passages when more detailed are always interesting, and instruct, even when they fail to convince.

The articles on Lucilius' use of Greek words, on the persons who figured in his Satires as friends or enemies, on the passages in which Horace seems to have imitated him, are all good and full: and we believe most students would be glad if the contemporary and rival editor had made larger use of the materials he has accumulated, as well as of the ingenious conjectures he has from time to time put forward.

But in knowledge of the chief source of the Lucilian remains, Nonius, M. Francken cannot claim to equal his contemporary. Herr Müller's contributions to the Rheinisches Museum have for some years been directed to this author; and his Nonian studies have added to the last edition of Ribbeck's *Fragmenta Tragicorum Romanorum* much that is new. Again, Herr Francken's acquaintance with the minutiae of Latin metre cannot be put in comparison with that of the author of the treatise *De re metrica*—a book which, even if not equal to its author's own high estimate of it, and containing perhaps more than a few disputable assertions, is the work of a man of considerable susceptibility to rhythm, which is certainly not the case with M. Francken, nor indeed with many other scholars of the present day. Herr Müller indeed considers metrical ignorance to be so decidedly on the increase that he has taken the trouble to fill up the greater part of the lines left fragmentary with the amount of feet required to complete them. This is surely in exaggeration; we cannot help thinking that his German, and we are sure that his English, readers will resent these trochees and iambs, still more the dactyls marked to fill up the hexameters, as intrusive and unnecessary.

The text with its accompanying *apparatus criticus* (this last carefully done and valuable in itself, even where Herr Müller's conjectures do not convince) is followed by a brief but generally sufficient commentary. Much of this is devoted to questions of orthography—of course a most perplexing point in Lucilius, whose ninth book was in part occupied with settling the spelling of his own time. Here again we feel happy in having the judgment of an editor trained in the school of Ritschl; and Herr Müller, usually arrogant and self-asserting, is content here to follow the guidance of the MSS., and without aiming to reproduce the Lucilian era—a task almost impossible—to present the spelling of the first century after Christ. In particular cases, however, where the MSS. on the whole pretty uniformly follow the standard of the later age of Roman literature, e.g. in writing *is*, *us*, *os* where the *s* is proved by the metre to be elided; again, in writing *est* for '*st*'; Herr Müller uniformly rejects them, and gives *i*, *u*, *o*, *opust*, *homost*, &c. In this, we should suppose, most philologists will agree with him; traces of all these seem to be still found; yet we could wish they were more decided in the first three instances, and we are not at all inclined to accept '*st*' as proved for Cicero and Virgil, and decidedly dissent from Herr Müller's *mihist*, *bonast*, &c., in Tibullus and Propertius, even if it be adopted for Catullus. Nor is the mode of stating the orthographical difficulty which we find on p. xvii. of the Introduction in any way true or adequate. It cannot be said that the mediæval copyists persecuted forms like *ei*, *ai*, '*st*', *u*' with deadly hatred; they were far too ignorant not to be abject and even slavish in their adherence to the originals which they copied; they were, speaking generally, the merest machines, and were not only without hatred, but without partiality. It is certainly not to the Middle Age that we are to ascribe the rare occurrence of archaic spellings; it must have set in long before. It seems indeed highly probable that the spasmodic attempt which the literary men of the age of the Antonines made to revive the phraseology of earlier Rome was accompanied by a modification of the standard

orthography of the day. This might arrest for a time the tendency—natural always, and attested in our own literature by the eighteenth century editions of our earlier writers—to ignore the grammatical forms and peculiarities of successive epochs, and merge them all in a common grammar. But we know from A. Gellius as well as from Quintilian how often the speculations and investigations of the literati of their time were at variance with the readings of their MSS.; and it may well be that the corrupt copies were cheaper and more widely circulated than those more accurately written. This would no doubt vary with various writers; Virgil was transcribed with religious reverence, and Ribbeck's text may reproduce for us the actual hand of the poet; but very few writers have come down to us in such excellent preservation as Virgil (a fact proved by the improbability of even a single passage requiring emendation), and even if we possessed an entire Lucilius we could scarcely feel confident that our MSS. gave us the author's own orthography, though the estimation in which the Romans held him might perhaps make them more than usually careful not to deviate from any text once received as authoritative. As it is, the main source of our knowledge of Lucilius is Nonius; and even where we can decipher Nonius, we do not know what kind of MSS. he used. Sometimes he may merely be copying some previous excerpter; though it is more likely that he used a collective edition of the Satires, as he specifies each book in quoting them. At any rate Herr Müller's view that he possessed two different sets of excerpts, one containing books i.-xx. with xxii., the other the whole number of thirty books except xxi., xxiii., xxiv., xxv., requires more elaborate exposition than he has given it at p. xviii. *Introd.*; nor can we see in Nonius that African negligence which is here ascribed to him (the *stupor Nonii* is an habitual phrase with Herr Müller), still less believe without a great deal of investigation the statement which we are commanded to grasp by the teeth, that of all the excerpts in Nonius not a single verse, with the exception of perhaps a few passages from post-Frontonian writers, is taken from MSS. of the complete works of the various authors to whom they belong. That must have been a golden age of excerpt-mongers when one of the most elaborate glossaries of which we know was taken entirely from anthologies. Surely, if we may form any idea of Roman philologists from those of modern times, half the satisfaction of composing a work like that of Nonius would be in the study and constant re-perusal of the originals. This does not in any way affect the probability of a revised edition of Lucilius for the use of schools, such as Herr Müller supposes (p. xvii.); if, that is, we may conclude from a passage of St. Jerome (in *Rufin.* iv. 2, 367, ed. Benedict.) that he was read by boys, for it seems unlikely that the works of a writer so coarse as Lucilius must have been should have been placed in the hands of youth entire: and yet we do not know of any passage in which expurgated editions are distinctly alluded to, and it may be doubted whether, e.g., the Satires and Epodes of Horace or the Metamorphoses of Ovid were a forbidden article in the school-rooms of Rome.

We feel some hesitation in speaking of the text of the Lucilian fragments as constituted by Herr Müller. As compared with the edition of Gerlach (Zurich, 1846) it is satisfactory, but the edition of Gerlach is utterly unworthy of him, nor can it be said of Herr Müller's Lucilius that he has completed what was left undone by Dousa. To confess the truth, there are signs of haste and temerity not a few; additional labour would, we think, have greatly improved the book. The editor is far too ready to accept his intuitions of what Lucilius must have meant—a fault always, even in the hands of Lachmann or Ritschl, but far greater where

the matter dealt with is a set of isolated fragments. We could wish that Herr Müller had consented to be less aspiring in this particular; in many cases the alterations are in our judgment very improbable, not to say absolutely wrong. Thus in the passage quoted by A. Gellius, xviii. 8, when Lucilius is ridiculing the *ῥητορικὴν πᾶντα* and other affectations of the school of Isocrates, the MSS. give these words:—

Si minus delectat quod alexnon et eissocratium est,

Herr Müller gives *quod τεχνίον Eisocratiumst* instead of the received *ἄτεχνον et Is.* This may be taken as a fair specimen of what we hold to be a mistake in criticism, the alteration of an author's text to suit a preconceived opinion. It is not that *τεχνίον* is in itself improbable; but that *ἄτεχνον* suits the requirements of the passage sufficiently to make alteration unnecessary. Take again the definition of virtue:

*Virtus est homini scire id quo quaeque abeat res,
Virtus scire homini rectum utile quid sit honestum,*

to change *scire id* into *scirei* is certainly no improvement; surely the ear of the author of the *De re metrica* was unusually dull when he went out of his way to introduce this elision; nor can it be thought probable to alter

Alcmenam atque alias lenam ipsam denique nolo

into *Alcmenam, atquei alias, Ledam i. d. nolo* instead of the generally accepted *Helenam*: more especially as we are told mysteriously of an "arcana ratio musica" which forbids *amphitapoe* to be elided, a case, we should have fancied, much more open to doubt. On what principle again does Herr Müller (xi. 16) write *hic stricosu' bouinatorque ore improbi' duro* instead of Hertz's *Hic 'st tricosu', &c.*, which is at once better metrically and at least as near to the MS. *hic stricosus* or *sitricosus*? The matter is put out of doubt by a gloss of Placidus, *bobinator trilosus et inconstans*. It may be observed in passing that another gloss of Placidus, *Mysta . . . summysta qui sub eo est* is almost enough to show that Francken's *subμειρακωδὲς* for the *symmetraciodes* of MSS. (v. fr. 6, ed. L. Müller) is right: the word is in fact only half Greek, and can hardly claim a place in Greek lexicons.

The same hastiness is perceptible in the uncritical way in which Herr Müller has treated the difficult and doubtful question of *ec* as a form of *ex*. The MSS. of Nonius preponderate in favour of *exferre*; and it is not unlikely that the MS. *haec uestimentis* in Non. 350 represents *ex vestimentis*, as the *ec* of *ecquis equando* is often thus corrupted. But this does not justify us in writing *edicam* for the MS. reading

*Nunc Nomentani quae ex testibus ipse rogando
Exculpo, haec dicam,*

still less for juggling the strange word *ecpendi* out of *apelli* or *apepelli* in Non. 339, nor does it follow because *Ecbatana ecquis* are sometimes written *Eibatana etquis*, that in the fourteen extra-Lucilian cases quoted from Nonius where *et* is followed by an ablative it represents an original *ec*. It may also, we think, represent *e*, sometimes *ex*; at any rate few will be satisfied with the palaeographical explanation (*e* confounded with *t*) of Prof. Munro, which is sufficiently disproved by the occurrence of *etquis*, &c., in the earliest and best MSS. of Virgil. Corssen admits *ec* before *f*, and we are disposed to allow that Herr Müller may be right in his *ex furnacib' ec flamma ec fenestreis*; but it does not follow that *et maconis manu* is a corruption of *ec m. manu*, *eo medio* of *ec medio*, *et* or *ea fontia* of *ec fontibu'*. It is at least possible that *ex medio ex fontibu'* are the right forms here concealed. So fond indeed is Herr Müller of this *ec* that he cannot help foisting it into a fragm. of Sueius' *Pulli* (No. 3), where the MSS. give *escam hic iure*.

A similar question might be raised as to the propriety of introducing *lum li* for *illum illi*. It is true that once or twice

the shortened form seems indicated by the MSS., e.g. *eodem pacto gannis* may possibly be *e. pacto 'lo gannis*, though it can hardly be *e. pacto li oggannis*; but this does not justify Herr Müller in writing *ueteratorem lum, defrudet li parcat* for the *u. illum, defrudet ali parcat* of the MSS.: and the editor himself seems to fluctuate on the matter, for xxix. 63, where the MSS. give *in mellis spem esse omnem*, he writes in the text *in me illis*, and only suggests *in me lis* as a possibility. This seems to us a strange reserve; for of the four instances above quoted this is perhaps the least harsh: it certainly does not look barbarous or modern, like *pacto li oggannis*.

It would be uncandid to deny that with all these defects Herr Müller's Lucilius shows no want of ingenuity. We can recall many instances of clever emendation, some as certain as emendation can be. Thus *uiat* for *uim*, *ubertim* for *uberi*, *caelum bibat* for *caelum uiuat*, *διαλλάσων* for *diallaxon*, *poleticon* for *poeticon*, are not likely to be improved.

In some cases, however, we prefer the emendations of previous editors. Thus in the difficult lines from B. iv. which appear in Nonius, *Tisifone tilene (tinete) pulmonibus atque adipe unguem Excoctum attuli Eumenidibus sanctissima Erynis*, Francken's *tithe e*, and Boot's *Eumenisin* are not supplanted by Herr Müller's *Tityi* and *Eumenidum*; nor can it be thought satisfactory in the author of a treatise on metric to ignore the possibility of a hiatus in *attuli*, and to read *attulit* without remark. Take again Lachmann's restitution of iv. 22—

*Quod si nulla potest mulier tam corpore duro
Esse tamen tenero maneat quin (MSS. maneatque) sucu' lactero
Et manans uber (MSS. manus uberi) lactanti in sumine sidat.*

Here Herr Müller has, we think, seen the truth in retaining *manus* and writing *ubertim*; but in every other way his text of the fragment is a retrogression. He writes *Quod sin ulla—manat quoi*—and (will it be believed?) *Ei manus*. And then we are told (p. 210) that Lachmann had tried his hand on the fragment in vain, and that Herr Müller has settled it, with scarcely any change, for ever! If again Apuleius informs us that Lucilius attacked two youths named Macedo and Gentius, this is no reason for altering the reading of the MSS. of Nonius, *hic est Macedo si agrion longius flaccet* into *h. e. Macedo, si Gentiu' l. f.*, and rejecting Quicherat's clever *si eugion l. f.*: or at least so plausible an emendation should not have been passed over in silence. And how can Herr Müller correct, as he has done, *rate ad catulos accedere (t) inultum* into *ferai ad c.*, overlooking the obvious *iratae*?

With all these drawbacks the new edition of Lucilius is a very considerable contribution to our knowledge of the earlier literature of Rome. The editor indeed is so well satisfied with his own performance as naively to confess his astonishment at the difference between Dousa's edition and his own, and to institute a comparison between his Lucilius and the immortal Lucretius of Lachmann. This is on a par with his arrogant abuse of Corssen, Usener, Ribbeck, and other leading philologists of Germany; it may be forgiven, but it does not diminish the distrust with which his own rash statements or unconvincing conjectures are received.

R. ELLIS.

Morosi's Studies on Italian Greek. [*Studi sui dialetti greci della terra d'Otranto, del Prof. Dott. Giuseppe Morosi, preceduto da una raccolta di canti, leggende, proverbi, e indovinelli nei dialetti medesimi.*] Lecce, 1870. VIII. and 214 pp. 4°

THE Greek language is at present still spoken in eight small towns situated in the neighbourhood of Otranto and Lecce: Martano, Calimera, Castrignano, Zollino, Martignano, Sternatia, Soletto, and Corigliano; not long since Greek was also heard at Melpignano, Curse, Caprarica, Cannole, Cutrofiano,

and at a more remote period at Galatina. In Prof. Morosi's excellent treatise we receive not only a very rich collection of popular songs, proverbs, and tales in the dialect of this district, but also an exhaustive investigation as to the character and origin of this peculiar Greek, together with a history of the Greek colonies founded in Italy during the Middle Ages.

We quite agree with Prof. Morosi that the grammar and general character of this branch of the Greek language do not allow us to doubt its mediæval origin. This Greek shares all the peculiarities of the modern dialects at present used in Greece itself. It is indeed an original development of mediæval Greek, and it is but natural to expect that it should have been strongly alloyed with Italian words and inflexions; but there is absolutely nothing to justify the inference that this dialect might be directly descended from the Doric Greek once spoken in that part of Italy. It appears almost certain that Doric Greek had completely died out under the sway of the later Roman Emperors; and Prof. Morosi adduces evidence to show that the Greek colonies, remnants of which we have before us in the Italian *Greci* of our days, were founded in the reigns of Basilus I. and Leo VI.—i.e. the time in which the Byzantine power was at its height in Italy (p. 206). The arguments employed by Prof. Morosi are not so much historical as linguistic, and it is interesting to follow them while difficult not to be convinced by them.

The texts which form the first part of the volume have little merit when considered as poetry, but are of great value in a linguistic point of view. It looks strange at first sight to see Greek printed in Latin letters; but in the first place the inhabitants of this district themselves do not employ Greek characters,* and secondly it would have been difficult to express the pronunciation of this Greek adequately in anything but the Latin alphabet. There are some peculiarities which render this dialect somewhat perplexing to a scholar not accustomed to the strange freaks of modern Greek. Take e.g. the proverb given p. 77, *O sciddo pu elistà cu daccànni*. It is not so easy to see that this is in Greek characters *ὁ σκύλος τοῦ ἰλακτῆ (= ἰλακτεῖ) ἐν δαγκάνει*, "a dog that barks does not bite." But would it have been possible to convey in any other way the peculiar interchange of *λ* and *δ* in *sciddo*, the Italian pronunciation of *σκ* as *sc*, the shortened form *ἐν* instead of *ἐν*, and the strange *elistà* for *ἰλακτῆ*, i.e. *ἐλυφτῆ*? In the same manner we believe that *psero* is less puzzling than *ψέρω* would be = *ξέρω, ξέρω*. *Θ* appears sometimes as a mere *s* (*psáno, πεθάνω*); sometimes as *t* (*télo, θέλω*); sometimes as a mere *h* (*hiatéra = θυγατέρα*—a form which we recommend to Prof. Key's notice.) An *ξ* is occasionally turned into *σσ*, but appears also as *fs*, e.g. *smifsane* (p. 56) = *σμιξανε*, *madàssi* = *μετάξι* (not *μέταξα*, as the author says). With regard to the vowels it is instructive to see that *η* frequently appears as *e*, cf. p. 98, where *emèra, fserò* (*ξηρός*), *gheràzo* (*γηράζω*), and other instances are given, some of which occur also in the ordinary forms of modern Greek, e.g. *sidero sìcero*, which occurs in *Solomos* and is the only form given by *Somavéra*. We accept this fact as a distinct proof of the ancient pronunciation of *η* as a (German) *e*-sound, in spite of Prof. Morosi's protests. In fact Mullach's arguments are quite ridiculous;

* A Greek correspondent quoted by Prof. Comparetti in his *Saggi dei dialetti greci dell'Italia meridionale* (Pisa, 1866) writes:—"En su griji, ma ta grammata grica, jadi emi en grafome; ce su pianno grammata pu mu ndiazzutte, andè ene psero esprimepsi o milimma pu turtea;" which means in modern Greek *Δὲν σοῦ γράφω μὲ τὰ γραικὰ (ἐλληνικὰ) γράμματα, διατὶ (διότι) ἡμεῖς δὲν (τὰ) γράφομεν καὶ πιδνω (μεταχειρίζομαι) τὰ γράμματα τοῦ μοῦ εἶναι εἰδιωμένα, ἀλλως δὲν ἐξέρω (νὰ) ἐκφάσω* (expri- mere = ἐσπριμεῖν) τὸ ὁμῆλημα (τὴν ὁμιλίαν) τοῦ τόπου.

it suffices to say that he adduces γίγας as an argument of η = ε, because γίγας = γηγενής. Or is there more weight in the supposed identity of ἦκω and ἔκω? But a dialect which has remained isolated for centuries does not change its pronunciation very much, and it is very probable that the Byzantine colonists who settled in Italy in the eighth or ninth century still pronounced η = ε. This is confirmed by another peculiarity, i.e. the pronunciation of υ as ου, which is clearly ancient (p. 100).

A characteristic change is that of χ into h, e.g. χῶμα being pronounced as *homa*, or rather *huma*. This is exactly what we should expect on Italian soil and under the influence of an Italian sky: comp. χήν = Lat. (*h*)anser, χόρτος = *hortus*.

We think that even the desultory observations taken—almost at random—from Prof. Morosi's work will suffice to show that this is a most interesting publication. It is in fact very creditable to the Italian school of philologists trained up by the excellent professor Ascoli, to whom Mr. Morosi has inscribed his volume. We cannot but speak very highly of the painstaking and methodical execution of this work, and there are but very few details in which we should venture to disagree with the author. He has difficulty in explaining the origin of the term *godēspina*, "giovane sposa," but neither what he suggests (p. 160) nor Ascoli's derivation (p. 213) from the Slavonic *gospōdina* appears probable. We think that it is merely an abbreviation of οἰκοδέσποινα, comp. the common Greek form οἰκοκυρά (or νοικοκυρά, comp. νῶμος = ὥμος).* The term *plonno*, "mi corico, dormo," is wrongly derived from ὑπνόνω (p. 174); it should be rather the common ἀπλόνω used in the sense of ἀπλόνομαι, "I stretch myself." In the mediæval compositions which will shortly be published by the present writer this word occurs several times of persons lying down to sleep. We have also been much interested in the peculiar use of πολεμῶ and its derivatives in the sense of *lavoro la campagna* (p. 162 and p. 167), which confirms and supplements my own note on the earlier version of Βελισάριος (Hamburg, 1873), v. 438. With regard to *ascadi* = ἀσκάδι, "fig," Prof. Morosi's suggestion (p. 213) is no doubt right.

We are glad to see that the living dialects of the Greek language are now undergoing very careful investigation, but we would wish that all works in this department might be as well executed as Prof. Morosi's *Studi*. The indefatigable editor of the νεοελληνικά ἀνάλεκτα published by the Philological Society Πανασσός at Athens, M. Deffner, promises a collection of dialectic words: let us hope that we shall get it soon, and in a convenient form. There are many happy expressions to be found in these dialects; as an instance we may quote from Italian Greek ἀρμοσία "matrimonium," which we think much prettier than the ordinary ὑπανδρεία. It is in this way that we shall more and more perceive the uninterrupted connexion between the present speech of the Greeks and the ancient dialects, which is after all the most satisfactory refutation of the absurd theory of a complete disappearance of native Greek in Greece itself.

W. WAGNER.

Intelligence.

The newly discovered mediæval poem which we mentioned some time ago appears now to be by a certain Ἀκρίτας. The MS. is at present on its way to Paris, and the whole is about to be edited conjointly by Mr. E. Legrand and Constantine Sathas.

Lovers of mediæval literature will be glad to hear that Mr. Ferdinand Meister has added an edition of Dares Phrygius *De Excidio Troiae* to his former edition of Dictys Cretensis (*Ephemeris Belli Troiani*). The new edition of Dares contains also an elaborate introduction giving a résumé of the investigations concerning the mediæval imitations of Dares.

*This suggestion has also been made by the reviewer in the *Literarische Centralblatt*. σὺν δύο ἐρχομένω.

The new edition of Cicero's Epistles by Wesenberg is now complete. This Danish scholar had already been favourably known to the students of Cicero by many excellent and brilliant emendations, but he has now conferred a great boon upon all lovers of Cicero by giving the results of his critical investigations in a handy edition easily accessible to all, while his former publications were very difficult to obtain. He promises to add a separate fasciculus in which he intends to comment at more length on the most important of his numerous emendations.

The first two volumes of a critical edition of the Iliad by La Roche (whose school edition was reviewed in the *Academy* some time ago) have just been published by Messrs. Teubner. The critical apparatus appears to be very valuable, but judgment must be suspended until the appearance of the volume containing the Prolegomena.

An interesting volume of Greek Popular Songs, most of them taken from a MS. anterior to the year 1550, will be shortly published by Messrs. Maisonneuve at Paris. It is edited by Mr. Legrand, who has also added a French translation of these poems.

Messrs. Teubner are about to publish a large edition of the Roman history of Dionysius of Halicarnassus, by Prof. A. Kiessling of Greifswald. As is well known to our readers a smaller edition of the same author has already been issued by the same editor in the *Bibl. Teubneriana*. The new edition is intended to bring a complete critical apparatus, an Index verborum, Prolegomena and Quaestiones Dionysianae on the sources of the author and some grammatical and stylistic peculiarities, together with an account of the editor's emendations. We may add that many new emendations are to be expected, especially in the first volume, which the editor himself allows to be in want of careful revising. We hope that we may in time also get an edition of the critical and rhetorical treatises of Dionysius by the same editor, these works being greatly in want of critical revision, and moreover accessible to most scholars only in the disgraceful Tauchnitz edition.

Messrs. Teubner advertise also new editions of *Justinus* by Franz Rühl, a gentleman already favourably known by two scholarly treatises on the mediæval circulation and the MSS. of this author.

Dr. Hermann Peter is about to issue a school edition of Ovid's *Fasti* with German notes.

The late Professor Holtzmann's *German Antiquities* have just been published. They include an edition, translation, and elucidation of Tacitus' *Germania*. The editor is Alfred Holder.

Professor Bursian's important work on the Geography of Greece is now complete in two volumes, with 15 maps.

Rivista di Filologia e d' Istruzione classica; direttori G. Muller e D. Pezzi. Roma, Torino, Firenze: Ermanno Loescher. Fasc. 1-9. 1872, 1873.—We have received the fasciculi of a new and important philological journal published monthly in Turin under the direction of Professors Giuseppe Müller and Domenico Pezzi. The *Rivista di Filologia* is one of the most hopeful signs of that renewed activity in classical study which we rejoice to perceive in Italy, and it may be interesting to our readers to learn by whom it is conducted. Professor Müller though by birth a German speaks of Italy as being to him "terra ospitale, e, come seconda patria, pregiata e diletta." He is now at Turin, having taught in former years at Pavia and Padua, and his most recent work appears to be a Greek lexicon. Pezzi has published lately a Latin grammar on modern philological principles, and contributes some important articles on classical instruction in Italy, besides minor papers, in one of which he ably defends and illustrates the locative origin of the genitive of the O declension. Besides the directors the most frequent contributors are G. Flechia, Gaetano Oliva (of Rovigo), Vegezzi-Ruscalla, D. Carutti (of Rome), D. Comparetti (Professor of Greek at Pisa), and Vigilio Inama. Of these Prof. Flechia is well known as the first Italian who published a Sanskrit grammar and as the first who gave scientific treatment to the Italian dialects on comparative principles, and as a successful and laborious teacher of the philology of language. All readers of the *Academy* know the name of Comparetti from Liebrecht's recent article on his *Virgilio nel Medio Evo*. Inama has published a Greek grammar; Carutti has edited the Satire of Sulpicia, and defends its antiquity against Boot and Teuffel. Francesco d'Ovidio (another contributor) has written on the origin of the single form of inflexion in the Italian noun. Vegezzi-Ruscalla appears to be strong on the Romance languages in general: he notices the curious indefinite article in Provençal *en* and *na*, which he is inclined to derive from the Celtic. A derivation of Flechia's (noticed p. 147) is interesting as showing how serious etymology may destroy ethnological theories based on guesswork. The Sardinian *nuraghe* have often been interpreted as Phœnician in name and origin. Whatever may be their origin, the name can hardly be appealed to any longer, as he seems to have proved that it is only a corruption from some provincial Latin derivative of *murus*, parallels to which exist as Lombard *muracca* and Venetian *murazzi*. It is perhaps a question whether the Latin equivalent would not rather be *muratae* than *muraces*, notwithstanding the parallel between *furrage* and *forname*. The chief foreign contributors are Th. Mommsen, and G. M. Thomas (of Munich); the former gives two papers, one on a graffito of the year 243 A.D. on the handle of a silver cup in the Turin Museum, the other on some points in the geography of ancient Piedmont, the chief being the determination

of the site of Clastidium in the neighbourhood of Placentia. Perhaps the most important contribution besides those already touched upon is a fragment of a Greek philosophical treatise from a palimpsest MS. of the Gospels at Bobbio, in which a passage of the *Parmenides* is quoted. These details do not by any means exhaust the interest of the journal, which promises to be a very useful organ of communication. It is not surprising that the writers should be much more familiar with what is being done in Germany than in England; but we hope that English publishers will send new philological books to the *Rivista*, and that English scholars will do something to support it. There ought to be at least as great a community of feeling between Italy and England as between Italy and Germany, or rather philology ought to rise above nationality entirely and draw its vitality alike from every soil.

ENGLISH DIALECT SOCIETY.

Mr. SKEAT writes to us that the formation of an "English Dialect Society" has been successfully accomplished, and already consists of about forty members, several of whom are known writers upon English dialects, or have contributed valuable publications to the London Philological Society or the Early English Text Society. But the list ought to contain many hundred names, and probably will do so as soon as the society's existence becomes generally known. With this view, the subscription has been limited to only *half* a guinea per annum, for which sum every member (who has *paid*) will receive one copy of every publication issued during the year. The objects of the society are to bring together all those who are interested in the matter, to combine the labours of collectors by providing a common centre and means of record, to publish (under proper revision) MS. collections of words, and to supply information to collectors. One of the first things to be done is to make a complete list of all books *not* in the usual "printer's English." This should contain a list of all Lowland-Scotch books later than A.D. 1707 (see Murray's *Dialect of the Southern Counties of Scotland*, p. 74), and all books in English dialects that are not mentioned in Mr. J. R. Smith's list, published in 1839.

The names of intending subscribers and workers should be sent in as early as possible, in order that they may appear in the amended prospectus, to be issued in a few weeks. Rough copies of the prospectus can be had on application to the hon. secretary. The treasurer is the Rev. J. W. Cartmell, Christ's College, Cambridge; the subscription, half a guinea per annum; the bankers, J. Mortlock & Co., Cambridge; the secretary, Rev. W. W. Skeat, Cintra-terrace, Cambridge; and the publishers, Messrs. Trübner & Co.

Donations of spare copies of local pamphlets in dialectic spelling (many of which are inexpensive but not always easy to obtain) will be thankfully received. Information about Scottish books is much wanted; probably the names of many are to be found in booksellers' catalogues in the north. The society has already to thank Prince Louis Lucien Bonaparte for his present of a copy of his "Deuxième Catalogue des ouvrages destinés à faciliter l'étude comparative des langues Européennes," together with a supplement.

New Publications.

- EGGERS, E. Notice sur un papyrus gréco-égyptien. Paris : Maisonneuve.
 FRITZSCHE, Th. De interpolationibus Horatianis. Part I. Berlin : Calvary.
 GROSSER, R. Zur Charakteristik der Epitome von Xenophon's Hellenika. Barmen : Bädeler.
 "HERMATHENA," a series of Papers on Literature, Science, and Philosophy by Members of Trinity College, Dublin. No. I. Dublin : Ponsonby.
 JEBB, R. C. Translations into Greek and Latin Verse. Cambridge : Deighton, Bell, & Co.
 KAUFMANN, J. Traité de la langue du poète écossais William Dunbar. Bonn : Weber.
 KOSSOWICZ, C. Inscriptiones palaeopersicae Achaemenidarum. Leipzig : Brockhaus.
 LENORMANT, F. La légende de Sémiramis. Premier mémoire de mythologie comparative. Paris : Maisonneuve.
 MIKLOSICH, F. Ueber die Mundarten u. die Wanderungen der Zigeuner Europa's. Wien : Gerold's Sohn.
 MIKLOSICH, F. Vergleichende Grammatik der slavischen Sprachen. Wien : Braumüller.
 SEXTI Sententiarum recensiones latinam, graecam, syriacas conjunctim exhibuit J. Gildemeister. Bonn : Marcus.

ERRATA IN No. 71.

- Page 165 (b) 24 lines from top, for "Egyptian" read "Egyptian."
 " " (b) 33 " " " " "amphora" read "amphora."
 " 167 (a) 34 " " " " "bottom for "fair" read "far."
 " " (a) 10 " " " " "A. J. Murray" read "A. S. Murray."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 72.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Monday, June 2, and Advertisements should be sent in by May 28.

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THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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No. 73.]

REGISTERED FOR

MONDAY, JUNE 2, 1873.

TRANSMISSION ABROAD

[Price 6d.]

General Literature.

Red Cotton Night Cap Country ; or, Turf and Towers. By Robert Browning. Smith, Elder, & Co. 1873.

WHEN Mr. Browning published *Dramatis Personæ* in 1864 it seemed permissible to suppose that his reputation was in some sense fixed. It was generally admitted that his poetry had certain faults ; it was coming to be generally admitted that it had also certain merits whose value might be open to discussion but in any case deserved to be rated high. It seemed too that criticism might be spared the sterile labour of balancing the faults against the merits when one grew visibly out of the other, and might settle down at leisure to the fruitful work of analysing the sources of the author's undeniable power, if it was too early to hope to ascertain his literary rank. Since then Mr. Browning has resolved to make the British public like him ; he has set to work with a will to get rid of the faults which went naturally with the merits that he had ; perhaps it was hardly surprising that in spite of his stupendous cleverness he has fallen into other faults which naturally go with merits which he will never have. We do not mean that his work is falling off, or that his own public have a right to be disappointed, but they have a right to feel disconcerted. Every new book is a surprise to them, they never know what to expect of him ; not because he is always putting forth new powers, but because he is always inventing fresh uses for old powers. The mere astonishing bulk and completeness of the *Ring and the Book* extorted too unlimited admiration for it to be obvious at once that clearness was purchased at the expense of prolixity, and even if it had been obvious it might have been retorted that *Sordello* was prolix without being clear. But *Balaustion's Adventure* and *Prince Hohenstiel-Schwangau* suggested a more alarming suspicion : it almost looked as if in rubbing off his roughness Mr. Browning would rub off his distinction too—as if he would file away asperities till nothing was left except an ingeniously intricate arrangement of too sterling common sense. Such fears were happily set at rest by the appearance of *Fifine* : the profane might object that the old harshness and obscurity were if possible exaggerated, but the faithful easily overlooked those familiar blemishes (and after all the meaning had more

room in the Alexandrine couplets than in the rhyming heroics of *Sordello*) ; it was enough for them to recover the old shifting subtlety of suggestion, the rapid depth of insight, which were not to be found elsewhere. Even in *Fifine* however it was possible to trace new aims which mingled themselves with the familiar charm : the dramatic power was unimpaired, but it was less disinterested, less impersonal than in most of the earlier work : the author seemed resolved to get out of the ideal medium altogether into the actual workaday world, and, though this was not altogether a novelty, he was preoccupied with some didactic purpose. Both the last characteristics come out very strongly in *Turf and Towers* ; but, like everything else that Mr. Browning has published since *Dramatis Personæ*, it compels us to revise our estimate of him. Certainly there is no lack of clearness here, there is no excess of rapidity to create confusion, but the distinctive feature of the book is a resolute pursuit of purely artistic graces. Talleyrand used to say that the Duke of Wellington spoke French with a great deal of courage : Mr. Browning has practised elegance and irony and other refinements of a Platonic dialogue with a vehement uncompromising energy which cannot but deepen our admiration of his prodigious intellectual force.

In form the book is an expansion and illustration of two conceits which appear to have occurred to the author in the course of a conversation with Miss Thackeray ; in substance it is an account of a recent *cause célèbre*, improved into a sermon against Ultramontanism and the particular form of pietism known by the convenient misnomer of Mariolatry. It seems Miss Thackeray has nicknamed a part of Normandy, and contemplates or contemplated writing a book with the nickname for title ; and he leads up to this statement elaborately for many lines, then he devotes many more to the startling suggestion which is only reached after three hundred and fifty lines—

"White Cotton Night Cap Country : excellent,
Why not Red Cotton Night Cap Country too?"

As none of the Norman peasants wear red nightcaps, and as that part of Normandy is remarkably moral, of course the suggestion looks paradoxical whether we take it literally or symbolically. For the remainder of the prelude, which occupies nearly a quarter of the book, the author keeps playing with this paradox, exaggerating it, putting forth little feints in defence of it, coaxing odd varieties of suggestion out of it with

an inventive persevering ingenuity that is sometimes almost amusing, as where he suggests an exhibition of nightcaps to succeed the exhibition of old fiddles at South Kensington. All the while he is feeling his way to the real subject, the tragical fate of a retired goldsmith who lived with a lady who passed for his wife in the odour of ecclesiastical respectability as an extravagantly generous devotee of a miraculous image of Our Lady known as La Ravissante, a corruption, though he did not know it, of Rare Vissante, the old name of the district. His apparent blamelessness, substantial wisdom, and unbroken prosperity are dwelt upon with an emphasis that is not unimpressive, and then we have the announcement—

“Now comes my moment, with the thrilling throw
Of curtain from each side a shrouded case.
Don't the rings shriek an ominous ‘Ha! ha!’
So you take Human Nature upon trust?’
List but with like trust to an incident
Which speedily shall make quite Red enough
Burn out of yonder spotless napery!”

After this we have practically done with the first title, which explains how the book came to be written; but before we can come to the main story the second title has to be explained. It is better worth explaining than the first, for it really gives the key to the temper in which the author wishes us to approach the subject, and this time the explanation is got over in about three hundred lines. This is not too much to make us familiar with two metaphors, both subtle and significant, which are strangely intertwined with each other and with the subsequent development of the poem. After Mr. Browning has set forth with picturesque energy his grounds for the belief that the *débris* of ruinous buildings and of ruinous creeds ought to be cleared away at every æsthetic sacrifice, while the parts of the ruin which are still in stable equilibrium may be left undisturbed if desired, he proceeds to suggest another contrast between the ramparts on which the sentries used to pace and the smooth turf that they enclose below; and this is an allegory of the faith we profess to defend and the pleasure which we find it natural to enjoy. From this point the poem proceeds as Mr. Browning promised “so straight to end” with a very telling directness: Leonce Miranda was the son of a fervent Castilian and a sceptical Frenchwoman; he himself was endowed with exuberant physical vitality, which had no outlet except work in his father's shop in the week and a spree at the end of it. These escapades seem to have been kept within limits by a shrewd shallow cunning of which its possessor boasted in letters read in court. Of course these amusements were quite compatible with unshaken belief in La Ravissante and a firm intention to reform and settle down. The conflict between faith and inclination only began when he was permanently fascinated by a comparatively respectable and ambitious adventuress who in the first instance represents herself as an injured innocent, the victim of destiny in general, and “Lord N., an aged but illustrious Duke,” in particular. The chronology of the first twelve years of the liaison is obscure, but the order of events was as follows: the hero discovers that his mistress is not a heroine, and has been maintained hitherto by one Cennino Centofanti, who is very ready to transfer his expensive favourite to her new possessor. Next the hero's brother and confidant, and then his father die, and his mother, who though sceptical by temper is in practice a strict Catholic, consents to tolerate the connection, which has to be avowed at last, as the lady's husband turns up in the person of a fashionable tailor established just opposite the hero's shop in the Place Vendôme, and brings an action for separation. The pair retire from the scandal to the country-house which Miranda the elder had bought at Clairvaux and restore it

if possibly rather too prettily, and live there very happily—the lady having a talent for knowing when she was well off, and the gentleman having a number of accomplishments which he carried far enough to give elegance to idleness. At the end of five years Miranda is summoned to Paris on business, as he has been spending rather too fast: some distant cousins who have managed the shop persuade the mother to exert her influence against a connection which she might once have broken off. As it is she only succeeds in provoking a painful scene, after which her son tries to drown himself; he is saved and nursed by his mistress, who spirits him up to assert his independence rather too harshly. Almost immediately after this he is summoned to his mother's death-bed, where the cousins have prepared a scene to persuade him that he has been guilty of killing her, in the not unfounded hope that he may be induced to atone for her death by giving up to them the wealth which has proved a snare to him. When the arrangements were almost completed Miranda shut himself up to read his beloved's letters before burning them, and conceived the idea that it would be a kind of expiation to burn his own hands with them. This is the central horror of the book, and we are prepared for it beforehand by many dark allusions which are so ingenious as to make us hope that they are not meant to be thrilling. The idea was carried out in a state of delirious exaltation which precluded all sense of pain, whence the surgeon who attended him inferred that he had been driven mad by spiritual terrors, while Mr. Browning finds a proof of the separate existence of soul and body, and Mr. Herbert Spencer, if his attention has been called to the case, might perhaps infer the independence of separate nervous currents and the power of one to neutralise others. This exaltation continued during the whole of Miranda's convalescence, only disturbed by a fear that as he was still haunted by the image of a woman he could not marry his expiation was incomplete. At last he was well enough to go out, and went straight to his mistress (whom the cousins had vainly tried to send on a wild goose chase to Portugal), brought her back with the announcement (which we suppose must have been really made as it leads to nothing in the poem) that her sex is changed and that she is his brother. Having now made the discovery that turf is solid as well as towers, in other words that he can calculate as certainly on his habitual desires as upon the beliefs which he supposes himself to hold, he determines to keep his property in the hope that in some form or other he will be able to buy the Church's leave to live with the woman whom he cannot give up. Accordingly he sells the business to his cousins on strict business terms, and goes down to Clairvaux to take religious advice. Mr. Browning it seems has a friend at Saint Rambert to whom he thinks poor Miranda might have applied with great profit, but he went to La Ravissante instead. Hereupon we have a very clever dissertation on the necessity of dealing with men according to their actual belief to prepare us to judge fairly of the action of the representatives of La Ravissante. They told the lovers a rather pretty story of a seventeenth century husband and wife in the neighbourhood who had parted to enter religion, and insisted unequivocally that it was *their* duty to follow such an excellent example; but as the lovers could not or would not part their advisers were content to accept their liberality in the hope that their alms might win for them the grace of conversion. Miranda gave lavishly, and among other extravagances went a pilgrimage of seven or eight miles on his knees, while his companion, who humoured his devotion, encouraged him to keep up his accomplishments: he painted pictures with his mouth, played the piano with his toes, and as he had artificial

hands made shot with them and never missed his bird. Two years passed not unhappily till on the twentieth of April, 1870, Miranda, who had been heard by one of the gardeners to speak of angels who would take him, was seen by the same gardener to step over the rails on the top of his belvedere and plunge forward. Of course he was taken up dead: his companion maintained that he had overbalanced himself in arranging the flowers: the author assumes that he had appealed to La Ravissante to work a miracle which would have converted him and the world. By his will he left his property to his patroness to be administered by his companion during her life. His cousins tried to set the will aside on the ground of insanity, but after a delay of two years it was affirmed on a trial where the materials for the book came out, and the author saw the lady in possession last autumn with a bright yellow chignon which he remembers though he has forgotten her face.

It is a serious misfortune to any man to have his heart set on living with another man's wife, especially in a country where marriage is indissoluble. Mr. Browning seems to think that this misfortune was immensely aggravated by Miranda's belief in La Ravissante, and it is probable enough that but for this belief he would not have burnt off his hands or jumped off the belvedere or even tried to drown himself; but Mr. Browning apparently wishes us to suppose that if he had seen through this belief he would have found it easier to part with his mistress, and here we find it hard to follow the author. Perhaps too he is over severe on the monks and nuns who took Miranda's alms: at worst their indulgence gave him two years of life in which if he did not conquer his love he did much to conquer his weakness.

Though it is to be regretted that Mr. Browning has made his story a vehicle for inadequate discussion of important theories this does not affect the value of his discussion of the two principal characters. Considering his intolerance of all the hero's attempted compromises with duty it is curious how sympathetically he handles the heroine. One hardly knows whether it is a compliment or not to say that her portrait reminds us of Balzac's chapter, "*Comme quoi le Rat est un animal constructeur.*" At any rate one gets a very clear and not unpleasant idea of a good-natured managing woman with a great talent for being responsive and much genuine active kindness resting on a foundation of cool quiet selfishness. She seems to have taken a very sensible view of the situation from first to last, though most readers will be inclined like the author to blame her for basing her estimate exclusively upon data which could be verified. Still better is the account of how the rich simple nature of the hero gradually gains depth and light and even something like purity in the conflict between two incompatible ideals, both, the author holds, unworthy of the loyalty which it strives to yield to both. As a result of the conflict he attains a full knowledge of the worth and strength of one of his ideals which can be tested here, and puts the power of the other to a test which has the merit of being decisive and is not irrational from his point of view. If the author had been seeking arguments against the hero's creed he might have found one in the difficulty of finding scope in that creed for recognition of this spiritual progress.

Perhaps Miranda's monologue before he leaps from the belvedere would have been richer and subtler if the author had not remembered a little too clearly that he was incapable of articulating his own thoughts; but even with this drawback it falls little if at all below the standard of Mr. Browning's best work, and it is led up to with an energy which doubles its value: consequently extracts cannot do it justice, but we extract some of the deepest and strongest lines, in which the hero states the problem of his life:—

"O you were no whit clearer Queen, I see,
Throughout the life that rolls out ribbon-like
Its shot-silk length behind me, than the strange
Mystery—how shall I denominate
The unrobed one? Robed you go and crowned as well,
Named by the nations: she is hard to name,
Though you have spelt out certain characters
Obscure upon what fillet binds her brow,
Lust of the flesh, lust of the eyes, life's pride.
'So call her and condemn the enchantress.'—'Crush
The despot, and recover liberty!'
Cry despot and enchantress at each ear.

You spoke first, promised best, and threatened most;
The other never threatened, promised, spoke
A single word, but when your part was done
Lifted a finger, and I, prostrate, knew
Films were about me, though you stood aloof
Smiling or frowning. 'Where is power like mine
To punish or reward thee? Rise, thou fool!
Will to be free, and, lo, I left thee loose!'—
Did I not will, and could I rise a whit?
Lay I, at any time, content to lie?
To lie, at all events, brings pleasure: make
Amends by undemanded pain! I said.
Did not you prompt me? 'Purchase now by pain
Pleasure hereafter in the world to come!'—
I could not pluck my heart out, as you bade,
Unbidden, I burned off my hands at least.
My soul retained its treasure; but my purse
Lightened itself with much alacrity.
Well, where is the reward?"

G. A. SIMCOX.

Notes and Intelligence.

We ought to have spoken sooner of two collections of reprinted papers by Dr. Dasent and Canon Kingsley issued respectively by Messrs. Chapman & Hall and Macmillan. Dr. Dasent's is entitled *Jest and Earnest*; the *Jest* consists of some political *jeux d'esprit* which had a *succès d'occasion* and of some energetic fooling about the bracing discomforts which cockneys can find in Faroe and the oddities of Wildbad. In the last there is a rather amusing Munchausenade about the great opal of the Shah of Persia; but in general the fun depends rather on a combination of intellectual vigour with high animal spirits than on any fresh or subtle sense of actual or imaginary incongruities. The *Earnest* consists partly of essays on English philology, which when first published did much to popularize what was then known, and even now would interest and instruct persons beginning the subject, and partly of a very vigorous and picturesque though not very critical version of the reigns of Magnus and Harold Hardrada, and as much of English history as is necessary to understand the invasion of the latter. This part of the book will have a permanent value until the Norse sources shall have been made accessible to English readers by a scientific historian.

Plays and Puritans, the best of Canon Kingsley's contributions to the *North British Review*, had already been reprinted in his *Miscellanies*. It certainly established two points of some importance: that the drama was in full decadence when suppressed, and was moreover almost as licentious as under Charles II., and that English gentlemen have adopted the Puritan standard of dress. The inference is that the Puritans were in their generation the representatives of good taste and good morals. A writer with more fairness would have remembered that Laud's High Commission fell quite as much because it harassed if it could not bridle the immorality of the gentry as because it enforced a ritual which has become universal; a writer with more insight might have observed that to be fruitful the discussion ought to begin at the point where Canon Kingsley leaves off. The essay on Sir Walter Raleigh and his times is an adroit and vigorous attempt to palm off pietistic effusion of a peculiar school as an explanation of historical facts. When the first two volumes of Froude's *History of England* appeared it was natural to claim them as a powerful support to Muscular Christianity: perhaps the Article is reprinted as a protest against the growing opinion that Mr. Froude has more fervour than faith, and that the clearness of his insight is hardly sufficient to warrant his self-confidence or excuse his inaccuracy.

We have received from Mr. F. D. Morice what we hope is only an instalment of a complete translation of the *Georgics* into the sevenline stanza of Chaucer. *The Bee* is a singularly close and faithful rendering of the Fourth Book, and at the same time a really spirited and delightful poem. The metre is managed with an original ingenuity which makes it convey a distinct reflexion of the rich harmony of Virgil's complicated system of cadences and pauses which check without breaking the stream of his music. Perhaps it would illustrate the measure of success which Mr. Morice has attained to compare his work to an arrangement of orchestral music for the piano, and we think this is almost or quite the highest measure of success that a translator of Virgil can attain. That this measure of success is anything but low will be shown by the following extract from this rendering of a passage which we select rather because the original is well known than because the translation is above the average:—

"His toil had failed, the ruthless bond was void,
And thrice Avernus thrilled with dismal cries.
'O love!' she wails, 'how are we both destroyed!
O mad, mad deed! Lo, cruel destinies
Summon me back! Sleep seals my swimming eyes.
Farewell! In darkest shrouds of night I flee,
And thine no more, stretch helpless hands to thee!'

She spake, and swift as vapour melts in air
Fled from her husband's sight: he clutched in vain
At every shade, and purposed many a prayer.
No more she saw him: ne'er might Charon deign
To grant him passage of the stream again.
Where could he turn, that twice had lost his love?"
What tears the Shades, what prayers the Gods might move?"

Almost the only fault we have noticed in this very brilliant performance is the use of "sky" without an article in the sense of "heaven."

We have received the first number of a new Parisian journal called *Paris à l'Eau-forte, Journal Hebdomadaire d'Actualité, de Curiosité, et de Fantaisie*. The preface states that the title has been criticised as "un peu ambitieux." Certainly it would lead one to expect something more than a few poor etchings placed as head and tail pieces to very foolish articles, and one confused illustration of an unpleasant war subject. "Nous ne comptons pas," say the editors, "fondre la grande ville dans une prose caustique à la façon de la perle de Cléopâtre." There is surely no need to "re-assure" their timid readers on this point. The first glance at the journal would, we should think, be sufficient guarantee against such a danger. The news of the "Chronique" of the journal is limited to the observation of a certain Annette who is seen in the illustration peeping through the jealousies of her window, and who remarks that "spring is a long time coming." The style of the illustration reminds us of those on the French match boxes.

In an article entitled "Extrémities Parisiennes" the author falls into raptures over "les pieds de Paris," and the artist illustrates the subject by two puffy, ill-drawn feet in sandalled and monstrously high-heeled shoes stuck out on an ottoman or fender in a very obtrusive and inelegant position, very different to Suckling's description of the feet that "like little mice stole in and out." Altogether a more trivial production than this *Paris à l'Eau-forte* has seldom fallen beneath our notice.

In the May number of the *Preussische Jahrbücher* R. H. notices a little book published by the family of Novalis (Fr. von Hardenberg), containing some unpublished letters from the Schlegels, the poet's brother Erasmus and others, with a few personal and domestic details that on the whole tend to confirm the estimate of his talents and character put forward by his later biographers. A passage from one of his own letters settles the question whence he derived the *nom de plume* by which he is most usually known: it was, as he says, "ein alter Geschlechtsname der Hardenberg's und nicht ganz unpassend." The same journal contains a notice of the German dictionary of the brothers Grimm, dwelling chiefly on the immense scale on which the work is planned, and an article on "Schön und Niebuhr" giving some interesting particulars relating to the political situation and attitude of the latter between 1809-1813.

It is stated that Mr. Mill has left directions for the immediate publication of his Autobiography, besides three works on "Nature," "Theism," and the "Use of Religion," one of which was to have appeared in the course of the summer.

Les Pénalités de l'Enfer de Dante is a little volume by the late Professor Ortolan, now published by his family, in which the influence of Roman law, the "written reason" of the Middle Ages, is traced in the punishments allotted by Dante to the various classes of criminals. An account of Brunetto Latini supplements the historical and legal notes.

In the *Revue des deux Mondes* (May 15) M. Fustel de Coulanges writes on *Les origines du régime féodal*, with special reference to the tenure of land under the Roman Empire and the Merovingians. He believes that the rise of the feudal system was due to causes entirely independent of conquest, and suggests that the owners of small allodial estates, who turned them into benefices for the sake of protection, formed for a time a class of tenant farmers intermediate between the actual cultivators who were more and more generally treated as serfs and the aristocracy which was gradually absorbing all the land into its own possession.

In the *Allgemeine Zeitung* (May 18, 19) M. Haug reviews very favourably the *Grammar of the Pashto, or language of the Afghans*, by Dr. Ernest Trumpp, just published by Messrs. Trübner & Co.

On the 23rd of May Count Alessandro Manzoni died at Milan. He was born on the 8th of March, 1784; his mother was a daughter of Beccaria, whose influence may be traced in the historical appendix or *Storia della Colonna infame* which was added to the fourth edition of *I Promessi Sposi* and was intended to give a more general application to the arguments in Pietroberri's *Osservazioni sulla tortura*, written in 1777, though their publication was not ventured upon till 1804. Manzoni reprints passages from the evidence given under torture of the supposed *Untorelli*, and argues that even if the crime of which they were accused had been possible, and even if the torture had been legally and morally justifiable, the judges and the populace after the plague in 1630 were still inexcusable for the atrocities they committed without evidence or motive. Manzoni's earlier poems possessed little merit; in 1810 his opinions, which had been originally those of his grandfather and the French *idéologues*, underwent a change indicated by the publication of his *Inni Sacri*, which may have had some influence upon the form of Lamartine's *Harmonies religieuses*, but are themselves chiefly remarkable for the purity and simplicity of their style and diction; *Il Cinque Maggio*, the ode on the death of Napoleon (written in 1821), besides those qualities (which are of themselves nearly enough to give distinction while the Italian language continues as at present a magnificent instrument on which no one knows how to play) had an original thought (that Napoleon was a good Catholic) and a clear, concentrated force of feeling which places its poetical value quite out of reach of historical or political criticism. The two tragedies which he wrote about this time, *Il Conte di Carmagnola* and *Adelchi*, were welcomed by the romantic school, though the first at any rate is sufficiently frigid: the theme is not new, the jealousy of the Venetian Government for its best generals; but the dialogue has occasionally a degree of life and vigour not unlike Alfieri in his more prosaic moments. Of course it is by *I Promessi Sposi* that Manzoni will be longest remembered as he is now best known: the romance has suffered much by its use as a reading book, the severest test to which a work of the imagination can well be submitted, but it has survived the test. Its place in Italian literature would be more easily fixed if it did not stand alone, at the head of a host of perfectly insignificant imitations; on its own merits, though Manzoni had nothing like the creative fertility of Scott, his one work may fairly be placed on a level with some—not the worst—of Scott's many. Its qualities are substantially the same as those to which the great Scotch novelist owed his popularity, and the difficulty of making historical lessons amusing is met in the same way by connecting the interest of the story with passions or prejudices that are really matter of

history. Manzoni interprets the Italian sentiment on the subject of religion as clearly and imaginatively as Scott does the chivalrous feelings of a losing side under arms, and though the sudden conversion, like that of the "innominato," of a brigand chief into a devout Christian, may not be entirely explained by anything in his romance, such incidents were common all over Europe at an earlier date, and the only psychological objection to his delineation is that the virtues of the converted hero belong to a rather different age from his vices. In the seventeenth century such changes of life were not common, and it would be rash to say that Manzoni was wrong as to a particular case, but when they were common the Church was seldom content to leave her penitent to save his soul by the practice of merely secular virtues. A pamphlet, *Osservazioni sulla morale cattolica*, published in answer to some passages in Sismondi's History of the Italian Republics, might have been written by any earnest and moderate Catholic. For the last forty years he has lived chiefly in retirement; in 1860 he was made a senator of the kingdom of Italy, and in 1868, in spite of his advanced age, he took part in preparing a report on the possibility of introducing unity of speech throughout the country by taking the Florentine dialect as the basis for an authorized Italian dictionary. He argued ingeniously that it was probable that in the course of a year exactly the same things were said in every town of the kingdom only in different words, and concluded that it was simply to substitute one set of words for another. Of course this appeared sophistical to all but Tuscans, and natives of Rome, Naples, or Venice were eager to instance phrases for which the Florentine idiom had no equivalent, while Manzoni himself admitted that phrases unintelligible outside the walls of Florence could hardly form a part of the national language. The controversy is of course natural, and can only end when a living national literature comes to exist and to be read throughout the peninsula. The citizenship of Rome was lately offered to the aged patriot, and Milan regrets in him her most distinguished son.

Art and Archaeology.

WILLIAM DAVIS.

WILLIAM DAVIS, who has just passed from among us—best remembered by his brother artists under the name of "Liverpool Davis,"—was a painter, though but slightly known to London exhibition-goers, of genuine and rare qualities, especially as a landscape colourist. This gift of colour was exemplified in Davis not by any seeking for opportunities of heaping up gorgeous tints, but by the singular truth and luminosity of his pictures. He was self-taught as a landscapist, and self-dependent. While a Turner, the great chief of the English landscape school, seemed to carry shut up in his paint-box the glories and beauties of each clime and country—to be dealt out almost daily, fair weather or foul, with unerring hand and unhesitating memory, and would often compel nature into his mould, now sublime, now at times theatrical,—Davis on the other hand was little given to improving the *lines* of such compositions as nature set before him, and was absolutely indifferent to grandeur in the choice of his subjects. Out of the commonest fragments of scenery round Liverpool he would sometimes make his finest pictures. A mill with a snatch of distant blue horizon—some turkeys in the foreground—a tree—sheltered pond with ducks—oftener still a brown ploughed field with horses at work and some crows and an indigo distance,—these he would sit down to and study, time after time, till he had as it were imbued himself with their hues and textures, and would then go home and reproduce them with more marvellous fidelity than many who paint on the spot. But his skies—the skies which are the weak painter's bugbear—these were his triumphs, and made his pictures in this respect unique. From them the light would as it were radiate, and would seem to brighten the corner of the room where the work was hung. For this reason Davis in a gallery was always a dangerous neighbour; and despite his sometimes over-minute, sometimes slovenly execution, pictures placed next his would, however elegant in *line* or neat in handling, be apt to look heavy and pointy. Such simple subjects as his leave little for the pen to describe:

but among his more important works may be cited "The Mersey, from Runcorn," in the possession of Mr. Rae, of Birkenhead; "Ploughing," the property of Mr. Humphrey Roberts; "Harrowing," belonging to Mr. Albert Wood; "In Bute," in the collection of his old friend and early admirer Mr. John Miller; also a pair of pictures called "A Spring Torrent" and "An Autumn Flood," owned by Mr. Roberts; and such works as "The Young Trespassers," "Oxton Common," "The Old House at Hale," "Bidstone Mill," and "Summer Noon," in the collection of Mr. Rae. The picture which perhaps exhibits in the most remarkable degree the painter's versatility, as distinguished from his other merits, is a large-sized half-length of a peasant woman, belonging to Mr. Humphrey Roberts. In this powers of drawing the human figure—rare in landscape painters—are displayed. His horses are always excellent. Davis was born at Dublin in 1812, and died on the 22nd of April of angina pectoris. The last fatal attack was brought on, it is said, by seeing his two pictures badly hung at the present International Exhibition: not that it should be inferred from this painful occurrence that Mr. Davis was a particularly thin-skinned or self-asserting man; for the direct reverse is true, and no painter was more willing to work his steady and modest way on through the give and take of professional life. He was a devout though unostentatious Roman Catholic, and leaves a large family to deplore his loss.

W. M. ROSSETTI.

EXHIBITION OF THE ARTISTS OF THE CONTINENTAL SCHOOLS.

AFTER the glare and excitement of the Academy exhibition it is refreshing to turn into the quiet little gallery in Pall Mall, where several of the well-known artists of the continental schools, and especially of the French school, have for many years been accustomed to display their works to their English admirers. This their twentieth annual exhibition, although it contains no great or striking picture, is distinguished by a larger proportion than usual of well conceived and well executed works. No pleasanter morning or afternoon can perhaps be spent among the picture shows now open in London than at the Pall Mall gallery. The sober tones that prevail here contrast pleasingly with the gaudy colours that fatigue the eye in most of our English exhibitions; and the true feeling for nature now visible in the works of so many continental landscape painters is what we were wont at one time to consider exclusively English. The French landscapists have undoubtedly learnt much from English ones, but in the present day they certainly seem to be outstripping their early teachers. When we find an Oak tree by Dupré realising 38,000 francs, a River Scene by the same 36,000 francs, a Frost Scene by Th. Rousseau 60,100 francs, and a Passage of the Ford by Troyon 62,000 francs—the prices reached at the sale of the Laurent-Richard collection—we begin to understand that the French landscape school has at all events achieved fame.

There are two pictures by J. Dupré in the French gallery—No. 19, "The Silvery Light of Early Morn," and No. 32, "The Golden Light of Eve." Both of these are charming in their effect, but in neither do we find the grand poetic conception of the "River Pastures" by the same artist mentioned in a previous number of the *Academy*, and now exhibited in Bond-street at the Society of French Artists. "The Dutch Fish Hawker," No. 45, by J. Israels, represents a woman with a baby in her arms and a basket of fish on her head wending her way through a wood. The subdued light of the wood or forest is admirably rendered. "Rustic Industry," 31, by Jules Breton, is another truthful and beautiful forest scene, wherein a girl stands knitting, leaning back against the trunk of one of the big trees. A sick child is brought to "La Sorcière Bretonne," No. 18, who with her finger pointed at it is using some charm or uttering some incantation for its recovery. Perhaps added to this she will also try the effect of some medicinal herb, for a pot is seething on the fire, no doubt containing some nasty compound. The faces of the Breton peasant and peasant women who have accompanied the poor mother to the sorceress are full of character and emotion. The scene is original and interesting, and is extremely well rendered. "Cherry Ripe," 22, and "Presents from Japan," 55, are in A. Stevens's usual style. They look as though they

were designed for illustrations for *Le Follet*, only the painting is so skilful and the details so carefully studied that one is obliged to consider them as works of art. J. E. Saintin emulates Stevens in giving us an utterly vacuous "Blonde en Bleu," 84, and a foolish picture of a languid fashionable lady at a glover's, 93. "A Peasant Girl of the Apennines," with chequered sunlight falling on her rags, 96, by Barilli, is a refreshing change after these vapid *Follet* pictures. We recognise the same ragged child in the other painting by Barilli, 130.

"Heemskerk and Barentz, the Arctic Explorers, making Plans for their Second Expedition to the North Pole (1595)," No. 131, is the title of an interesting picture by C. Bisschop, who gives us also in "The Sexton's Daughter," 86 (though why sexton's daughter it is difficult to say) the portrait of a sweet puritanical maiden whose side face we have the advantage of seeing in a looking-glass. She sits at a table surrounded by pewter and glass goblets.

"The Visit to the Taxidermist," 113, by N. Lagye, is a very clever picture in the style of Marks but without his humour. It represents a mediæval couple with their young son entering the shop of an old taxidermist, who stands at a long table surrounded by all sorts of queer birds and strange creatures. The subject is well composed and the painting most skilfully executed. Altogether the picture may well bear comparison with Marks' rendering of a similar subject in the Academy exhibition. "Shrimp Fishing—Early Morning—Dutch Coast," No. 153, is the most truthful and therefore most beautiful sea picture that we have seen for a long time. Only two fishermen and a boy and a girl wading in the low water with their nets on a grey misty morning, no effects of colour, no bright green sea, but just the grey scene itself transferred so truthfully to canvas that it is not robbed of any of its quiet beauty. "A Breton Peasant," 123, by Jules Breton, is one of those striking portraits that French artists often produce. It stands out in such bold relief from the canvas that at the other end of the room one might almost mistake it for a living being. The face is full of passion and seems to have a story behind it, but what it is we cannot read. The picture, we understand, forms a pendant to one now exhibiting in the Salon of a Breton woman performing penance.

Many other admirable and skilful pictures may be found in the French gallery. Indeed we find our catalogue perfectly scored with notes of admiration; but space will not permit of more being mentioned here, except the clever sketches by Meissonier, lent by M. F. Petit from his private collection. Most of these are exhibited in the upper room. They are merely little rough sketches, but show the true artistic skill.

M. M. HEATON.

NOTES ON ART.

It is strange that the sale of two genuine works by Raphael, one of them in tolerably good condition, should not have created more interest than did that of the Magliana frescoes at Paris a few weeks ago. These frescoes were painted for Leo X. to adorn the walls of the chapel of a favourite hunting-seat of his, called La Magliana, about six miles from Rome. In the seventeenth century the Popes appear to have given up hunting, or at all events to have deserted La Magliana, and it was made over to the Convent of St. Cecilia, of Trastevere. But the nuns of Trastevere had no use for the place, and therefore rented it to a farmer, without, it would seem, making any arrangement for the preservation of the frescoes. The farmer probably cared less for frescoes than for pigs, but he cared a great deal for his own dignity, and in order to avoid saying his prayers with his domestics he had a sort of tribune erected, to which he gained access by means of a door cut through the very centre of Raphael's "Martyrdom of St. Cecilia." Nothing indeed was left of this work but a few figures on either side, that were sold the other day to a Russian agent for 11,500 francs. The other fresco, however, as it did not interfere with the farmer's dignity or comfort, was suffered to remain, and by and bye the nuns of Trastevere, getting into difficulties, be-thought them of their neglected treasures at Magliana, and had them transferred to canvas, and then pledged them at the Monte di Pietà. Here they remained for about a year, when they were again removed to the Basilica of St. Cecilia in Trastevere. Finally, in 1869, they were bought by M. Oudry, who had them conveyed to France.

The principal of these frescoes, the only one indeed worth speaking of, for the St. Cecilia is a mere ruin, represents God the Father blessing the Earth.

This important work, the only fresco by Raphael out of Italy, was secured for the Louvre by M. Haro for 207,500 francs. It is not unreasonable to ask what the authorities of our National Gallery were about to let such a treasure escape them when it might have been secured for £8,500.

New Publications.

CHAMPOLLION. Notices descriptives des monuments de l'Égypte et de la Nubie, conformées aux manuscrits autographes rédigés sur les lieux par l'auteur. 14 Livr. Paris: Firmin Didot Frères.

CUNNINGHAM, Alexander. Archaeological Survey of India. Four Reports made during the years 1862-1865. Trübner.

DEMMIN, Auguste. Histoire de la céramique en planches phototypiques inaltérables, avec texte explicatif. L'Asie, l'Amérique, l'Afrique, et l'Europe, par ordre chronologique. Livraisons 71 à 74. Paris: Renouard.

ILAM EN NAS. Historical Tales and Anecdotes of the Times of the Early Khalifahs. Translated by Mrs. Godfrey Clerk. H. S. King.

LOESCHHORN, H. Zum normanischen Rolandsliede. Berlin: Weber.

MAZE, Alphonse. Notes d'un collectionneur. Recherches sur la céramique, aperçu chronologique et historique, avec marques, monogrammes et planches phototypiques d'après le procédé de la maison Goupil. Paris: Le-Clere.

MÉNARD, René. Histoire des beaux-arts. Moyen âge, architecture, sculpture, peinture, art domestique. Claye: Le Clere.

MÉZIERES, Alfr. W. Goethe; la vie expliquée par les œuvres; dernières années. Leipzig: Brockhaus.

ORTOLAN, J. Les pénalités de l'Enfer de Dante, suivies d'une étude sur Brunetto Latini apprécié comme le maître de Dante. Paris: Marescq.

PIOT, M. Eug. État civil de quelques artistes français, extrait des registres des paroisses des anciennes archives de la ville de Paris. Publié avec une introduction. Paris: Pagnerre.

ROSENBERG, Adf. Ein Beitrag zur Geschichte der Berliner Archaeologie. Berlin: Borntraeger.

ROSENBERG, A. Herr Prof. Böttcher als Archäolog. Berlin: Bornträger.

THE ORKNEYINGA SAGA. Edited by Joseph Anderson. Edinburgh: Edmonston and Douglas.

WARING, J. B. Ceramic Art in remote ages, or the sepulchral urns of the early inhabitants of Europe and the British Isles. Asher and Co.

Theology.

The Theology of the New Testament. [*Lehrbuch der biblischen Theologie des neuen Testaments.* Von Dr. Bernhard Weiss.] Berlin. 1873.

DR. WEISS's compendium, in this its second and enlarged edition, is a valuable contribution to the critical study of the New Testament. The author occupies a middle position between the extreme orthodox view which expects to find in the various writings of which the Bible is composed, no matter what their age or authorship, a complete agreement as to doctrinal truth, and the rationalistic criticism which regards those writings as entirely human in their origin, and declines to look beyond natural historical conditions to account for the peculiarities by which they are marked. The New Testament writings, he thinks, have a specific character which they could not have if the Christian life and consciousness had a purely human origin. This character depends on the fact that in the manifestation of Christ a perfect revelation of God was given; but inasmuch as the writings collected in the New Testament confessedly proceed from different authors, and belong to different times, a variety of religious ideas and doctrines may naturally be looked for. There is indeed such a thing as the unity of truth, which it is the province of Biblical dogmatic to bring to light; Biblical theology, on the other hand, has to do only with the variety of forms which are spread out along the course of historical development. Whatever be the defects of this hypothesis, at any rate it leaves the field open for a really scientific examination of the contents of the New Testament writings.

Dr. Weiss takes those writings as they stand, and states in a clear and succinct form, but with accompanying notes and explanations, what he considers to be the substance of their teachings on the various points of which they treat, neither endeavouring to explain away difficulties nor to torture their sense into agreement with any dogmatic system. That, indeed, he has never unintentionally permitted his hypothesis to modify his conclusions it might be too much to affirm, but we need not at least hesitate to accept his assurance that he is not conscious of having taken a single step in his inquiry under the influence of subjective feeling, or without confirming it by the minutest comparison of texts (*Preface to second edition*).

In the introduction to his work Dr. Weiss gives us an interesting sketch of the history of his science, together with a brief summary of the results of the labours of its principal representatives. The first part treats of the doctrine of Jesus according to the earliest tradition, and here—no doubt correctly—only the synoptical gospels are made use of, without however prejudicing the apostolic authorship of the fourth gospel, which in any case belongs to a more advanced stage in the development of the Christian consciousness. The primitive apostolic doctrine in the pre-Pauline period forms the subject of the second part; the third treats of the Pauline doctrine, the fourth of the primitive apostolic doctrine in the post-Pauline period, while a section on the Johannine theology completes the work. An obvious difficulty which this division suggests is the question whether we have in fact any writings earlier than Paul, or which can be regarded as altogether independent of his influence; and although it is possible to believe, without any recurrence to the documentary hypothesis, that the Petrine speeches in the Acts contain some authentic echoes of the earliest gospel, it is much more difficult to agree with Dr. Weiss that the epistle of James, with the well-known passage about faith and works, was written without any reference to Pauline teaching; while 1 Peter, which is put in the same category, looks the more doubtful just in proportion as reliance is placed in the Petrine speeches of the Acts. On the other hand, whether we admit with our author the genuineness of the epistles of the imprisonment or not, our judgment on that point will not affect our estimate of the value of his very full and generally satisfactory exposition of the Pauline system, inasmuch as those epistles are assigned a place by themselves, as belonging to a later stage in the apostle's life, and presenting a different phase of doctrine. The pastoral epistles are treated as Pauline, but not Paul's. To the post-Pauline period belong, of course, the epistle to the Hebrews, the Apocalypse, 2 Peter, and Jude, as well as the historical books; but in regard to the first of these writings the author seeks to reverse the received view, when, following Ritschl and Riehm, he pronounces it not a composition directly of the Pauline school, but a Jewish-Christian work with merely a Pauline colouring. The writer he thinks was a Hellenist, educated in a school in which the Alexandrine philosophy prevailed, but a disciple of the primitive apostles. He does not deny the influence of Alexandrinism on the form of his teaching, but will not permit us to turn to Philo for the genesis of his doctrine of Christ's person. But probably no one would think it necessary to assume any direct borrowing from Philo, and the admission of an influence, however indirect, implies all the difference between a truth directly revealed and an idea, which may be true or not, evolved in accordance with natural psychological law. If Dr. Weiss means that the view of Christ as the pre-existent Creator presented in the epistle to the Hebrews was revealed to the writer, that is an assumption which it would be impossible to prove; but in order to suppose that he would never have arrived at that

view if Philo had not preceded him it is not necessary that his doctrine and Philo's should be identical. One of the most valuable sections in the work is that on the Apocalypse, in which reason is shown for questioning the usual reference to the Nero legend in the allegory of the beast one of whose heads was wounded unto death, but whose deadly wound was healed. The beast is here the Roman Empire, which received a deadly wound by the death of Nero; but the healing of the wound refers not to any imagined return of Nero to life, but to the accession of Vespasian. The usual explanation would require not merely the healing of the wound, but the restoration of the head: is not this, however, demanding rather too much consistency in what purports to be a vision? As Dr. Weiss thinks that the Apocalypse is probably the work of the apostle John, and as he admits that its author was quite a different person from the author of the gospel and the epistles, it would naturally be supposed that he gave up the genuineness of the latter. This, however, he is not inclined to do. He supposes, in fact, that in the twenty years subsequent to the destruction of Jerusalem which he spent among the Greek Christians of Asia Minor the apostle *became* quite a different person, and while admitting that many enigmas would be solved by ascribing the gospel to the disciples of John rather than immediately to himself, he thinks that the testimony of the gospel itself compels him to hold to the direct apostolic authorship. Here again, as in the epistle to the Hebrews, the help of Philo is rejected, nor does the author desire to look beyond the Old Testament for an explanation of the peculiar theology of this gospel. The Logos of John is simply the Word of God of the Hebrew Psalms and Prophets, and if the manner in which the doctrine is stated seems to presume a certain familiarity with its terms on the part of the reader, the difficulty is explained by a reference to the oral teaching of the apostle. Surely, however, St. John, if he was the author, would have written with a view to readers who had not, rather than who had, enjoyed the benefit of his personal instructions.

It is not easy in a few sentences to give a fair idea of a book covering so great a range of subjects as this. Dr. Weiss's position of compromise between the orthodox and the purely naturalistic view seems to me untenable; but his work is learned, candid, and impartial, and will repay a careful study.

ROBERT B. DRUMMOND.

A Critical Examination of the Life and Teachings of Mohammed. By Syed Ameer Ali, Moulvi, M.A., LL.B., of the Inner Temple, Barrister-at-Law, &c. London: Williams and Norgate. 1873.

THIS book is a remarkable and welcome indication of the growing influence exercised by modern European ideas amongst certain circles of Indian Mohammedans. It is an apology for Islam, but from a rationalistic standing point. The author does not share the orthodox ideas respecting inspiration and miracles. He regards the Koran not as the word of God in the strict sense, but as the work of Mohammed, whom he reveres as the greatest and wisest of human teachers. One might almost say that he ranks the prophet, considered as a man, even higher than is usual amongst the orthodox. He is reluctant to admit that he was capable of a weak, much less a bad or inhuman action. With a skill which betrays the practised lawyer he softens or evades whatever is unfavourable to Mohammed in his authorities. We are far from wishing to ignore the great and noble features in this strangely composite character, but no unprejudiced student of the Koran, the ancient biographies, and the collections of traditions will be able to accept the author's general verdict. Much that strikes us disagreeably

in Mohammed admits of excuse if we take his age and circumstances into account; but the way in which he made the Koran subserve his private purposes even in such secular matters as the affairs of his harem; his many pious frauds; the severity which, although generally inclined to clemency, he exercised towards a few of his vanquished enemies, and many other traits, show him in an entirely different character from that of an enthusiastic philanthropist. The author is obliged to reject incidents, like the torturing of Kinâna (Ibn Hishâm, 763), which are given on good authority, without telling us who could have been either able or desirous to incorporate such discreditable untruths with the received tradition. It may be said too that Mohammed's ready reconciliation with many, especially of his own countrymen who were conquered without being truly converted, was more to his credit as a politician than as a prophet seeking only the things of God.

The enthusiastic picture of Islam which the author draws will scarcely tempt any of us to give our adhesion to a religion in which a series of, to use the mildest word, troublesome usages (circumcision, the five prayers with their strange gestures and attitudes, the Ramadhân fast, pilgrimage to Mecca, with the old, mostly heathen, ceremonies there, &c.) have always been recognized as holy and necessary, and are positively prescribed by the highest authority. The crude form of the doctrine of revelation, and the thoroughly human conception of the deity which only the most violent system of interpretation can eliminate from the Koran, would alone suffice to repel us. We can understand the powerful impression which the doctrine of retribution in the Koran would make upon an audience already in some measure predisposed to accept it; but it would leave us cold, or at most produce a slight impression, attractive or the reverse, upon our imagination. Islam, the grandly simple, severely one-sided development of Semitic religion, was certainly a blessing to many lands, especially to those with a Semitic population; but in spite of the author's able *plaidoyer* we should doubt much whether the partial advances to which it led in Persia and India could compensate for the serious evils which it brought upon those more richly endowed and finely organized nations. The author indeed takes much pains to represent Islam as the religion of humanity, but he cannot get rid of the fact that it bore from the beginning a character of violence and claimed the right to subdue everything by the sword, distinguishing all mankind into the three classes: enemies outside the pale of law, subject half-believers (Christians, Jews, &c.), and true believers. The latter, it is true, were regarded, according to the spirit of Islam and the will of its first leaders, as all possessed of equal rights, and the religion itself is not answerable for the pride of the Arabs which made them refuse, in the first centuries of Islam, to recognize this equality of rights in new converts of foreign nationality (cf. v. Kremer's *Culturgeschichtliche Streifzüge auf dem Gebiete des Islams*, Leipzig, 1873), and thus provoked the fierce hatred of the converted Persians, which manifested itself in the overthrow of the purely Arab dynasty of the Omayyads and other features of the Persian reaction. Islam, indeed, is not the only agent in the history of the Arabs and the other Islamite peoples, and we are not therefore entitled to give it credit, as the author is disposed to do, for all the bright sides of Arabian and Persian culture in the Middle Ages. The consideration of this Oriental culture shows on the contrary exactly what limits are imposed by Islam on the free development of the intelligence, and all historical facts must be disregarded before we can speak with the author of "the wonderful adaptability of the Islamic precepts for all ages and nations" (p. 187). While Christianity—from the

beginning no merely Semitic growth—showed an extraordinary capacity for development, so that there is an unbroken historical continuity between the modes of thought of the freest European thinkers and of the primitive Christians, the far simpler nature of Islam has never admitted of such transformation. It is pure self-deception when Ameer Ali with his humanitarian ideas considers himself as still a real Moslem. Islam seems to have passed through all the stages of internal development of which it was susceptible in the first centuries of its career. The intellectual freedom which is the vital atmosphere of modern progress has been won by an attachment, never quite interrupted, and reinvigorated by the Renaissance, to the principles of Greek culture. Of this Islam at its origin possessed nothing, and in later years comparatively little, and only as a superficial influence. Yet the author actually attempts to show that the Reformation was determined by Islamic influence! and it is evident that he is absolutely unable to appreciate the value of Greek culture, since he compares the age of Hârûn and Mâmûn with that of Perikles, and is indeed inclined to give the former the preference (p. 295). No one would demand a knowledge of classical antiquity from an educated Hindoo, but it would have been well if the author's English friends had been able to convince him that under the circumstances his judgment on such subjects had better have been reserved. When he reckons amongst the "three great evils which have befallen the human race," or the "three great disasters which have materially retarded the progress of the world and put the hour-hand of Time back for centuries" (p. 341 sq.), the failure of the Arabs to take Constantinople in the eighth century and the repulse of the Saracens by Charles Martel—we may differ from him, and yet allow that there is much to be said for his opinion; but when we find "the failure of the Persians in Greece" given as the first of these "disasters," what can we say? He argues indeed that "if the Persians had succeeded in bringing Greece within the circle of their dominions the influence of the Hellenic genius would have been far greater;" but this only shows more plainly that he has no conception of the nature of that Hellenic genius, which could only attain to its highest development in *free* Athens. This is confirmed by some of his expressions relating to Greek philosophy and other subjects. Ameer Ali has certainly read many European books (good and bad), but he should not have ventured, in reliance upon such erudition alone, to frame an original theory of the history of mankind; he was naturally not in a position to avoid all danger of oversights in great as well as trifling matters. Even as an historian he takes narrow standing ground, as the European reader may judge from the fact that in his preface he assigns "a place in the rank of the greatest historians of Europe" to Ibn al-Athîr, an excellent compiler, such as are not rare in Arabian literature. Less excusable than this weakness, in a learned Moslem writing upon Mohammed, is his insufficient knowledge of Arabic grammar, in proof of which it is only necessary to refer to the gross blunders with which the Arabic passage on p. 29 swarms.

One mistake, which the author shares with all Shiite and almost all Sunnite Moslems, is that of over-estimating Ali. A mystical obscurity early began to envelope the person of this gallant but incapable ruler, which, however, our authorities enable us to dissipate. We can confidently maintain that Ali, though the son-in-law and favourite of Mohammed, did not thence derive any right to the throne. The legitimist theory did not gain ground till later. We must even admit that in the rising against Othmân and his murder, Ali, as well as the two other pretenders, Talha and Zobair, played a very ambiguous part. No unprejudiced person can

doubt that the astute Moâwiya was far better qualified to guide the mighty empire. The author, however, still places himself at a point of view unfavourable to the Omayyads. We by no means wish to imply that the frivolous Yezid I., who had not inherited the administrative wisdom of his father, was in any respect a model prince, but it is altogether unhistorical to place him, as the author does, on a level with Nero and Caligula because he caused his troops to suppress the mad insurrection of Hosain and to chastise the hypocritical inhabitants of the holy cities. The Arabs have really no reason to be ashamed of their thoroughly national royal house, to which the great princes Moâwiya and Abdalmalik belonged; though the roots of their power did not, it is true, lie altogether in religion and consistent fidelity to the doctrines of the prophet whose successors they claimed to be. The men of powerful intelligence, in which the Mekka aristocracy was singularly rich, had for the most part opposed the prophet with all their strength, but as soon as his authority was established they placed themselves at the head of the further movement. We find Koraishites everywhere in command of armies and provinces, and the house of Omayya, which had fought most obstinately against Mohammed, soon obtained the throne. But the religious and historical tradition was mainly in the hands of the zealous adherents of the prophet, who were hostile to the dynasty by which they were kept in the background, and favourably disposed towards pretenders, especially those of Ali's house. As soon therefore as the Omayyads were overthrown the "learned" no longer had any motive for judging them favourably, and historians of the present day are consequently liable to be deceived by statements which have been coloured by party feeling. That our author is not entirely free from bias in judging this situation is only a fresh proof of the difficulty which even the most cultivated and intelligent inquirers find in freeing themselves from the misconceptions amongst which they have grown up.

Many other single points might be discussed, or we might dwell on the naive style of historical criticism and interpretation of inconvenient passages, which remind us of the favourite procedures of the German rationalists of the beginning of the present century; but we have already exceeded our limits. In conclusion we would rather insist again on the pleasure with which we hail in the author a warm and sincere advocate of humane ideas. Though we cannot share his opinion that Mohammed's teaching agrees with the highest demands of humanity, it is eminently satisfactory that he should choose such a standard to test his religion by.

TH. NÖLDEKE.

Contents of the Journals.

Theologisch Tijdschrift. May.—Religion before the discovery of fire; by C. P. Tiele. [Partly a criticism of O. Caspari's *Die Urgeschichte der Menschheit*, u. s. w., a good book, which points out the right direction for future investigators, but suffers from oneness. The oldest form of religion must be reconstructed by abstraction from the later. We must first of all separate those parts of religion which have a relation solely to fire from those which may have belonged to an earlier period. If on historical investigation it appears that the latter are actually found among the least developed races, we may conjecture with great probability that they belonged to the primitive religion.]—Strauss and Christianity; by J. H. Scholten. [Appeared first in English in *The Theological Review*.]—Matthew Arnold; by L. W. E. Rauwenhoff. [Extracts from *Literature and Dogma*, with discriminating reflections. Was then, asks the reviewer, the revelation of Israel, even in its purest form, really so devoid of definite conceptions? Can the Bible as a whole be recommended as a "book of conduct"? Mr. Arnold's quotations are very limited in their range. The sixth chapter on "The New Testament Record" is one of the weakest in the book. What evidence is there that Jesus was absolutely free from the unsound fancies of his contemporaries? Is not Mr. Arnold unjust to the "Aryan genius" when he calls upon us to return to the religion of a nomade tribe of

Semites? Imitativeness is fatal in art; is it less fatal in religion? The main point of the book (too much neglected by the English reviewers) is the separation of religion from every form of dogma, even that of a personal God. Here the reviewer joins issue with the author. On the whole Mr. Arnold, for whom the reviewer betrays much sympathy shows a strong likeness to Rousseau in his independence of conventions and advocacy of a return to "nature."—Lagarde *On the Relation of the German State to Theology, Church, and Religion*; rev. by A. Kuenen. [A plea for "the Gospel" in opposition to "Christianity."—Works of Finzi, De Gubernatis, Whitney, &c., noticed by Tiele; of Frankl. Grätz, Colenso, and Delitzsch, by Kuenen.]

Zeitschr. für wissenschaft. Theologie. Vol. xvi. No. 2.—Pauline researches; by A. Hilgenfeld. [Criticises 1. Lüdemann's *Anthropologie des Apostels Paulus* (very favourably), 2. Hirsch's essay on the Epistle to the Philippians in the *Zeitschrift*, and 3. Holtzmann's *Kritik der Epheser und Kolosserbriefe*, which has entirely failed to convince the reviewer.]—Exegetical studies on the New Testament; by E. Harmsen.—Philo and the received text of the LXX; by C. Siegfried.—The ostrich in Job xxxix. 13-17; by Dr. Egli.—Epigraphic contributions to the history of the Herodian family; by E. Schürer.—Xeniola theologica; by H. Rönsch.—The letter to Diognetos; by A. Hilgenfeld. [Adverse criticism of Overbeck's view placing this letter in the age posterior to Constantine.]—Notices of books: On Dicstel's edition of Knobel's *Isaiah* (favourable), and Grätz' *Song of Songs* (adverse); by Egli. On Schrader's *Die Keilinschriften u. das A. T.*; by Siegfried. On Weiss' *Biblical Theology of the N. T.*; by A. H. On Tischendorf's (new and cheaper) edition of *Clementis Romani epistulae*; by A. H. [Cf. Lipsius in *Academy*, vol. i., p. 255 sq. In some cases Tischendorf accepts Lightfoot's view of the reading in Cod. B.; in others, and even in I. 24, he defends his own view; the commentary presents little that is new.]—Miscellaneous: Explanation of the inscription published by Schlottmann as Moabitish in the *Z. D. M. G.* xxvi. 411; by Hitzig.

New Publications.

- BIBLE, The. With Commentary. Edited by Rev. F. C. Cook. Vol. III. Murray.
 COLENSO, J. W. The New Bible Commentary, &c., Critically Examined. Part V. Deuteronomy. Longmans.
 IRÉNÆUS. Works: transl. by Rev. John Keble. [Vol. 42 of Library of the Fathers.] Parker.
 KEIM, Th. Celsus' wahres Wort. Aelteste Streitschrift gegen das Christenthum vom J. 178, wiederhergestellt, übers. u. erläutert. Zürich: Orell.
 MOSSMAN, T. W. A history of the Catholic Church of Jesus Christ from the death of St. John to the middle of the second century. Longmans.
 MÜLLER, Max. Introduction to the Science of Religion. Longmans.
 ROBERTSON, J. C. History of the Christian Church. Vol. IV. (A.D. 1303-1517.) Murray.

Science.

The Expression of the Emotions in Man and Animals. By Charles Darwin. London: John Murray.

THE publication of a new work from Mr. Darwin's pen is an event of scientific as well as of public importance, and in this double aspect it becomes a task as difficult as responsible to prepare a notice of such a book. As regards the scientific questions the reviewer is placed at a disadvantage: whatever his knowledge and acquaintance with the subject may be, he may be certain that it will not suffice for the task, for Mr. Darwin has the peculiarity of opening up in each of his books new fields, where critics may perhaps find themselves impelled on less important points to controvert this or that opinion of the author, but where in general they share the position of other readers in sitting silent to learn.

If however we do not altogether refrain from discussing the new book lying before us, our main object is to give our readers an idea of the fresh fields explored by the great naturalist.

How often it has been stated that among the chief privileges of man as contrasted with the lower animals is the great gift of physiognomical expression—a gift which seemed all the more peculiarly human as it became obvious

that other animals, being destitute of the innumerable emotions of man, could not present traces of the innumerable expressions dependent on these emotions. The belief in this elementary constitution of man's nature was so great at one period that physiognomy came to be regarded as a science as important and conclusive as astrology had been in the Middle Ages; and the more hidden the actual connection between mind and body in this case, the more one pretended to intuitive knowledge about it, the more one shrank from subjecting the great achievements of which some profound physiognomists boasted to a critical examination. When we remember how Lavater spent a great part of his life in the study of physiognomy, and recall how Goethe entered into correspondence with him on the subject and sent him portraits and silhouettes, can we wonder that the great mass of the people held a belief in the most direct connection of character and mind with the expression of the face? Goethe, it is true, was not an absolute believer in the art of judging of the inside of a man by looking at his outside, for he wrote on one occasion to Lavater: "Seitdem ich keine physiognomische Praetension mehr mache, wird mein Sinn sehr scharf und lieblich, ich weiss fast in der ersten Minute wie ich mit den Leuten dran bin;" he nevertheless occupied himself in thinking over the principles of this so-called science.

Mr. Darwin himself, in the Introduction of his work, gives us a short review of what has been done in physiognomy by treatment with the scientific method. For it is not altogether nonsense—as little in fact as astronomy is nonsense, because people at one time believed in astrology. From M. Moreau, who held that the *corrugatores supercilii* from their attachment and position are fitted "à resserrer, à concentrer les principaux traits de la face, comme il convient dans toutes ces passions vraiment oppressives ou profondes, dans ces affections dont le sentiment semble porter l'organisation à revenir sur elle-même, à se contracter et à s'amoinrir, comme pour offrir moins de prise et de surface à des impressions redoutables ou importunes,"—to Messrs. Bain, and Herbert Spencer, and especially Sir Charles Bell, Mr. Darwin traces in a slight sketch the development of physiognomical investigation and philosophy.

It is not so much physiognomy, however, that constitutes the main subject of interest in the new book as the Darwinian theory which lies before us in a new guise where we would scarcely expect to meet it. Mr. Darwin has in fact fulfilled a promise given in the preface of the *Descent of Man*, of which work it forms a part and may be considered the third volume.

It is not the anatomy nor indeed can it be called the physiology of expression of which Mr. Darwin treats. His object is rather to trace its origin in the ancestors of man, and to give an exposition of the principles involved in the different modes of expression in man as well as in other animals.

Mr. Darwin is always bound to face a considerable difficulty in all that he writes. Having originated the doctrine of Natural Selection, it falls to his lot more than to anyone else to show the universal application of this principle in all forms of organic life. In truth, there is no one who has done so much to search out the hidden corners where the action of Natural Selection is to be recognised, and where this principle alone gives a satisfactory explanation of problems hitherto unsolved.

Writers in the *Revue des deux Mondes* and other journals and books may use every effort to convince their readers that the theory of descent is not Mr. Darwin's great achievement, but is due chiefly to Lamarck and others; it nevertheless remains a simple truth that Mr. Darwin's elucidation of the

actual influence of Natural Selection throughout the whole organic world has been the means of overthrowing the old doctrines of separate Creation—still held by some naturalists even of high rank, and believed in by all those who cling to old traditional beliefs rather than to new scientific doctrines, for the simple reason that they believe all human knowledge to be vanity, and as a consequence prefer ignorance to inquiry.

Though Mr. Darwin not only originated the doctrine of Natural Selection as the chief principle ruling the development of the organic world, but is also its chief supporter and expounder, he nevertheless holds that Natural Selection in the strictest sense does not afford a universal explanation of all the phenomena of organic life, past, present, and future. The theory of Sexual Selection, for example, was proposed to meet the difficulty. When endeavouring to explain all the facts by Natural Selection Mr. Darwin perceived that changes in organisms occurred which were clearly not dictated by the simple action of this great principle, but by some other and minor one, which he termed the principle of Sexual Selection. The acceptance of this principle has met with considerable resistance from a good many naturalists, and even many evolutionists, who, seeing in it, we believe wrongly, an abandonment of the theory of Natural Selection, make war against their own leader. Perhaps these same gentlemen will not be entirely satisfied when they examine the three principles to which Mr. Darwin reduces all the modes of expression of emotion in man and animals. For if everything that happens is only to be tried by the test of its survival on account of its usefulness in the struggle for existence (which would bring it within the domain of Natural Selection) it may appear as if the three principles of expression do not come within the range of the discussion.

The first of these principles is that movements which are serviceable in gratifying a desire, or in relieving a sensation, if often repeated become so habitual that they are performed, whether they are of any service or not, whenever the same desire or sensation is felt even in a very slight degree.

The three principles with the many instances by which they are illustrated in Mr. Darwin's book are of interest not only as teaching physiognomy, but, as we have already indicated, in attempting to introduce the theory of Evolution into our knowledge of the functions of man and other animals. To take an example: if we consider how a person uncovers his canine teeth in expressing defiance or contempt the action would be explained by all those who are not Evolutionists by an endeavour to show the direct influence of scorn or defiance on the muscles that execute this movement. It would be difficult to find a satisfactory explanation of such uncovering of the canine teeth in a sneer. One could hardly understand why contempt or defiance is more nearly related to uncovering the canine than other teeth, why in short it has anything whatever to do with teeth. Mr. Darwin, however, on seeking out the origin of such action finds it in another function that belonged to the ancestors of man—to the lower animals, in which showing the teeth, and especially the canine teeth, denoted readiness to bite and fight. Man as a rule no longer bites his enemies, yet the uncovering of the canine teeth in a sneer is still a very usual function to express indignation, contempt, defiance, or scorn. That this should ever happen in man is only to be understood by his relationship to the lower animals, and thus a special physiognomical function of man is derived from another more or less defensive function of those animals.

A similar movement, and one only to be interpreted by similar reasoning, is the protrusion of the lips in anger and

scorn: in itself it is useless and would have no meaning, but viewed as an offspring of animal function it is clearly understood. A great number of other instances of a like kind might be quoted from Mr. Darwin's book.

Regarded from a biological point of view this book derives its chief interest from being a successful attempt to trace the origin of special functions, to introduce the theory of Evolution into the domain of physiology.

Here it seems we do meet with an element not strictly an essential constituent of the theory of Natural Selection, for as Natural Selection tends to preserve only what is useful and serviceable for the struggle of existence, movements that are not actually beneficial ought not to be retained.

The second principle is that of antithesis. The habit of voluntarily performing opposite movements under opposite impulses has become so firmly established in us by the practice of our whole lives that if certain actions have been regularly performed in accordance with the first principle under a certain frame of mind there will be a strong and involuntary tendency to perform directly opposite actions, whether these are of any use or not, under the excitement of an opposite frame of mind.

This principle points still more directly to a hidden root whence actions spring. The former leads us to look for an origin of animal action that is not to be found in direct usefulness alone, while the movements which Mr. Darwin classes under the principle of Antithesis seem, to judge by the examples and illustrations he gives, often to be quite superfluous and without the slightest direct bearing.

Lastly, the third principle is the direct action of the excited nervous system on the body independently of the will and independently to a great extent of habit. The direction which this nerve-force follows is necessarily determined by the lines of connection between the nerve-cells with each other and with various parts of the body. But the direction is likewise in a large degree influenced by habit, inasmuch as nerve-force passes readily along accustomed channels.

The origin of functions is a question as yet almost wholly untouched. The discussion of this strange subject leads us of necessity to another of an equally remarkable nature, namely, the active and passive resistance which the theory of Descent finds in more than one physiological school.

In earlier years, when physiology existed almost everywhere in, so to speak, personal union with anatomy, the dislike felt by physiologists for abstract morphology was less marked. Though physiology was always regarded as the cardinal science in relation to the great problem of life, it did not altogether disregard the aid of anatomy and morphology in working out solutions of special physiological problems. The labours of a man like Johannes Müller alone suffice to prove this, and his handbook of physiology teaches on almost every page the important influence of morphological views on physiological research. If we extend our gaze still farther back we find this striking feature of a combination of scientific physiology, anatomy, and morphology becoming more strongly apparent.

After Johannes Müller, however, and as soon as the great break happened about the theory of Vitalism, especially after the publication of Du Bois-Reymond's great work on *Thierische Electricität*, physiologists in general got rather out of the habit of carefully studying anatomical or morphological problems, while in some quarters there sprang up the idea that morphology was not so much a science as an excellent pursuit for amateurs—a more or less innocent amusement to which one might devote one's attention if one chose, but which would exercise no influence on the general march of human ideas, and through a want of method

and exactness could scarcely be termed a science. Exactness came to be identified with experimental research, and physiological laboratories provided with complex apparatus and frogs, rabbits, and dogs and other animals, were considered the chief tribunal, before which life was challenged to confess its latest secrets.

There can be no question that this line of physiological research derived great advantage from the application of physics to the consideration of physiological questions. Thus the physiology of the senses and nerves attained to a wonderfully high degree of true exactness. It is perhaps due to these very results that at the time when the methods of experimental physiology were held in such respect the microscope and microscopists were a little too lightly regarded—a feeling which culminated in the dictum that a microscopical discovery scarcely lasted longer than five years. It must be admitted that at the very period of the highest development of experimental research in physiology morphology laboured under a temporary want of new ideas. The struggle against the overwhelming influence of speculation in the beginning of this century had ended in the other extreme, in an accumulation of mere facts. The want of ideas was necessarily followed by the absence of criticism, and thus morphology and zoology resembled in some respects a dictionary containing all the words necessary for the construction of a thoroughly philosophical book, but which is not the book itself.

Mr. Darwin came, and the book was written. By it morphology became burdened with important questions, the answers to which have not only a bearing on morphology itself, but extend its boundaries into fields where it touches on one of the most fundamental questions by which the human mind ever has been or can be agitated. The *Origin of Species* led to investigations concerning the origin of innumerable other things, the beginnings of which had hitherto lain in utter darkness and were believed hidden once and for ever. The theory of Evolution began to affect with its principles and methods nearly every department of human thought, but the stronghold from which it derived its methodical power was and is morphology.

Thus of a sudden the sister sciences physiology and morphology became once more of equal importance, and one might perhaps say that at present morphology has just claims to be held the greater. Such a claim however would be vain and useless, for it is impossible that physiology should any longer delay to adopt with equal energy the methods and principles of the theory of Evolution, and by so doing range itself once more close beside morphology—nay, and embrace so entirely the doctrine of Evolution that a break between physiology and morphology, such as has existed during the last twenty or thirty years, will be rendered impossible in future.

And it cannot be questioned that the new task of physiology will be to investigate the origin of functions. If it be true that all organisms now living are the descendants of former living ones, and that these former living ones possessed simpler characters, this of course will hold good equally in respect to their functions, and it becomes necessary to trace not only the change and differentiation of the organs, but also those of the functions. To do this effectually physiology must not restrict its investigations to frogs, rabbits, and dogs, but extend them over the whole animal kingdom. And in doing so it will at once find how powerful an aid morphology is, how indispensable and how ready to help its sister science, and how rich in questions which on its part it is unable to solve except by alliance with comparative physiology.

This is a powerful reason for congratulating ourselves on

the appearance of Mr. Darwin's new book. It not only gives rules and principles to physiognomy, connecting by new ties man and his mental world to animal life and its bodily constitution, but traces a new and highly important line of inquiry with respect to the origin of functions. In showing how in many cases the function of expressing emotions has its origin in other functions, he has led us to that immense and almost endless path which physiology must traverse in respect to all and every function in order to attain that point where life itself becomes but a function of matter, a part of which Spinoza determined when he said, "Cujus essentia est existentia."

ANTON DOHRN.

Notes on Scientific Work.

Geology.

New Tertiary Mammals.—Prof. O. C. Marsh describes some new species and a new genus (*Colanoceras*) of mammals from the tertiaries of the Rocky Mountains, examples of which are deposited in the museum of Yale College. A study of additional specimens of *Orohippus* has led to its separation from *Anchitherium* and shows it to hold an intermediate position between that genus and *Palaeotherium*. *O. agilis* possesses four functional digits in the manus. The first premolar is nearly as large as the second, and an antorbital fossa is absent. The skull is elongated and equine in its proportions. The orbit is not enclosed behind. There are three upper true molars and four premolars. The radius and ulna are separate. This species differs from *O. pumilus* in having the inner cones of the upper molars more nearly of equal size, each exhibiting a distinct basal ridge. The animal was nearly as large as a fox. The new genus *Colanoceras* differs from *Hyrachyus* and *Hedades*, so far as they are yet known, in possessing a pair of dermal horns on the nasal bones, which are placed opposite each other. In *C. agrestis*, which was about as large as a sheep, the horns are widely divergent. *Dinoceras lucaris* has the inner posterior tubercle of the penultimate molar double; the last true molar has a tubercle in the angle of the transverse crests, and is also wanting in the second posterior tubercle. The basal ridge is continuous on the inner side of each of the three upper premolars. This as well as the foregoing species are from the Eocene of Wyoming. *Oreodon occidentalis*, which occurs in the Miocene of Oregon, resembles *O. Culbertsoni* in most of its cranial characters, but differs materially in the large auditory bulla, which is several times the size of the postglenoid process. It is smaller than *O. major* and has the frontals between the orbits more depressed and the antorbital fossa deeper. *Rhinoceros annexens* was apparently about half the bulk of *R. pacificus*, but resembles it in some of its dental characters. In the upper molars, however, the transverse crests approach each other much more nearly, while in the true molars they are united. The basal ridge is also much less developed on the inner side of the upper molars. Upper incisors are present, one of the lateral ones being much depressed and its crown very short, as in the existing *R. javanicus*. This species is likewise from the Oregon Miocene. Another new species of this genus *R. Oregonensis*, much larger than those of the Miocene, occurs in the Pliocene deposits of Oregon. One of the specimens found is a penultimate upper molar which differs widely from the corresponding tooth of any of the known species. At the union of the transverse posterior ridge with the outer cusp there is a deep cavity, nearly circular, and enclosed by a vertical cylinder of enamel. The anterior crest also is divided, a strong branch being sent inwards and backwards from the posterior side into the main transverse valley. (*Amer. Jour. of Science*, May, 1873, 407.)

A Bird from the Rupelian Clay.—M. P. J. Van Beneden has examined (*Bulletin Acad. Roy. des Sciences*, 1873, No. 4, p. 354) the fossil remains of a bird from the Rupelian clay of the Waes country, sent to the Belgian Academy of Sciences by Dr. Van Raemdonck. They consist of a complete sternum, the greater part of the cranium with some of the face bones, fragments of lower maxillary, an entire clavicle, one complete humerus, two coracoids, two radii and ulnae, one scapula, one tibia, a phalanx, and two tarso-metatarsals. These are all well preserved, and possess the peculiar tint of all fossils from this clay. M. Gaudry finds them to belong to an individual of the species *Anas marila*, generally known by the name of *Milouinan*, which still lives in the Arctic regions, and visits some parts of Europe during the autumn and winter months. It is the only known living representative of the birds of early tertiary times.

Discovery of a New Human Skeleton of the Palaeolithic Epoch in Italy.—M. E. Rivière describes (*Comptes Rendus*, 1873, Part 16, 1027) the remains of a second fossil human skeleton from the sixth cave

of Baoussé—Roussé (Grottes de Menton), Italy. The skeleton was found at a depth of nearly four metres below the floor of the cave lying extended on its back in the longitudinal direction of the cave. The deposit forming the floor is regularly stratified, and consists of charcoal, ashes, of small calcined angular stones, bones and teeth of animals, shells, and flints. Associated with the remains were numerous flint implements and a few worked in bone, as well as a number of perforated shells belonging to the genera *Nassa*, *Buccinum*, *Cypraea*, &c.; these, from their position, had evidently formed parts of a necklace and bracelets, and were interred with the body. The extreme friability of the bones did not allow of their removal in so perfect a condition as that of the first skeleton, but, in this case also, they belonged to a tall individual, the skeleton measuring nearly two metres in length. In the debris of the cave bones of the following animals were met with:—*Ursus spelaeus*, *Hyaena spelaea*, *Canis lupus* and *vulpes*, *Arctomys primigenia*, *Lepus cuniculus*, *Mus*, *Equus caballus*, *Sus scrofa*, *Bos primigenius*, *Cervus Canadensis*, *Elaphus corsicus* and *capreolus*, and *Capra primigenia*. Besides there were found some bones of a large eagle and some birds of passage, as well as numerous species of marine shells of the genera *Patella*, *Pectunculus*, *Mytilus*, *Pecten*, *Dentalium*, and *Trochus*.

The Geology of Mount Léberon, Vaucluse.—M. A. Gaudry contributes to the French Academy of Sciences some details of the geology of Mount Léberon. The mass of the mount consists of lower cretaceous rocks, as indicated in the geological chart of MM. Dufrenoy and Elie de Beaumont, with the middle tertiary covering its southern slope but not reaching its summit. Between Cucuron and Cabrières d'Aigues the lower tertiary consists of molasse, the lower beds of which are grey and yield very few fossils, the upper being yellow and containing principally *Janira planosulcata*, *Pecten scaberrimus* and *Ostraea Boblayi*; these appear to represent the horizon of the faluns of Bordeaux and Tournai. At Camille-Jean, near Cabrières d'Aigues, occurs a bluish-grey sandy marl yielding several species of marine shells in good preservation, many being quite new; they belong to the highest horizon of the falunian. The beds at Cabrières enclose bands of pebbles with broken shells, indicating a beach deposit. There are moreover beds of a light-grey colour which enclose *Ostraea crassissima* in little groups of four or five individuals. The marine beds are covered with a thick layer of marly limestone which appears to have been formed in bogs; it bears *Helix Christolii*, and many other species of bog shells. The upper part passes into a reddish loam in which are embedded remains of *Hipparion*, *Rhinoceros*, *Gazelles*, &c. M. Gaudry remarks that the comparison of the mammifer remains of the upper and the marine mollusca of the lower beds tends to confirm the observations made by Darwin, Lyell, and himself in other parts of the globe, that the higher organised animals existing at a period nearer to our own are much more changed than the lower forms of an older date. MM. Fischer and Tournouër find amongst the molluscs fifteen species identical, or nearly identical, with those now living, while all the mammifers on the contrary are quite distinct from the present species, and belong to the genera *Machairodus*, *Ichtherium*, *Deinotherium*, *Hipparion*, *Acerotherium* (?), *Helladotherium*, and *Tragocerus*. Like the fauna of Pikermi in Greece, Baltavar in Hungary, and Concud in Spain, those of the red loam of Mount Léberon appear to belong to the late Miocene or tortonian epoch. M. Gaudry believes that he has been able to distinguish seventeen successive fauna in the tertiary epoch. (*Comptes Rendus*, 1873, Part 17, p. 1096.)

Physiology.

Mechanics of the Secretion of Bile.—At the meeting of the Medical Society of Vienna held on the 28th of March Professor Stricker communicated the results of an investigation undertaken in his laboratory by himself in conjunction with Dr. Röhrig with the object of determining the relation of the secretion of bile to the amount of blood contained in the abdominal viscera. This inquiry he remarked had already been taken up by Schmuljevics and Ludwig, who had observed that bile continued to be secreted when blood was injected into the excised liver. Röhrig repeated and corroborated this result, though the quantity of bile he obtained was very small. It was a question therefore whether the bile thus excreted is actually the result of the secretory activity of the liver or whether it is merely mechanically expelled from the organ in consequence of the distension of the blood-vessels. The question was decided by the injection of water or dilute solution of common salt, when it was found that no bile was secreted. In Stricker and Röhrig's experiments it was considered at the outset a matter of importance to determine whether, as Pflüger and Hering maintain, the nerve-fibres pass directly to the hepatic gland cells, in which case they would constitute the chief factors in the production of the biliary secretion, while, if these do not, the secretion must be directly dependent on the blood. As regards the rapidity with which the secretion is eliminated the means hitherto adopted for its determination have not proved very satisfactory. The introduction of a tube into the ductus choledochus is a defective method, for the pressure in the biliary ducts is very small, and a slight deviation of the tube from a horizontal position may produce considerable

differences in the result, more bile flowing when the tube is directed downwards, less when it is inclined upwards. Stricker and Röhrig endeavoured to improve upon this method. They experimented on curarized animals, and introduced a canula into the ductus choledochus to which a flexible caoutchouc tube was attached, the latter ending in an outflow tube that was kept in position by a vice. The quantity and rapidity of the secretion was then determined by the metronome. In these experiments they noticed : 1. That in fasting animals the secretion of bile is checked, while it is increased after feeding. 2. That the introduction of water into the stomach or intestines somewhat increases the secretion of bile, but has no permanent influence upon it. 3. That the administration of purgatives, such as croton oil, colocynth, rhubarb, aloes, jalap, calomel, Epsom salt, &c., unquestionably increases the secretion of bile. 4. That ligature of the vena portae and hepatica immediately stops the secretion. Ligature of the vena hepatica materially diminishes the secretion. 5. That ligature of the aorta at the diaphragm materially diminishes secretion, but does not entirely arrest it. Ligature below the origin of the coeliac artery immediately causes increased secretion. Ligature of the vena cava ascendens causes immediate stoppage of the secretion. It appears from this that hyperaemia causes increase, anaemia decrease in the amount of secretion formed. Moreover all those agents which induce contraction of the vessels bring about a marked diminution of the biliary secretion : when for example an exposed nerve is excited, or the spinal cord divided from the brain, injection of strychnia leads to the same result, and the same is true of various remedies ; those that produce hyperaemia increase, those which cause anaemia diminish the biliary secretion. (*All. Wien. Zeit.*, 14, 1873.)

Anaesthesia by Cold.—That intense pain is produced by immersing the hand in cold water is well known. Horvath in a recent number of the *Centralblatt* (No. 14, 1873) states that during some experiments on the effect of cold on frogs he accidentally discovered that the immersion of the finger in alcohol at a temperature of 25° F. produces no pain. Glycerine in its action resembles alcohol, while ether comports itself like water, and in quicksilver the pain is even more intense. When the finger is in cold alcohol slight contact with another body is distinctly experienced, but pricking in a degree to produce pain in other fingers is not felt. Tactile perception therefore remains, though sensations of pain and cold are not experienced. Struck with this observation Horvath proceeded to make a practical application of the fact in cases of wounds and burns, and found not only that the pain immediately ceased when the burnt part was immersed in alcohol, but that the subsequent progress of the case was greatly benefited. He considers that if the opinion be well founded that in extensive burns the fatal termination is caused by the pain being continuous, the removal of such pain may be accomplished with advantage by the application of cold alcohol. He is also of opinion that by this means traumatic tetanus may be prevented.

Botany.

Protection of Pollen against Premature Displacement and Moisture.—Dr. A. Kerner reprints from the *Proceedings of the Medical and Scientific Society of Innsbruck* an interesting memoir on this subject. Pollen is of two kinds, powdery and coherent. The former kind is found almost exclusively in those plants whose fertilization is effected by the agency of the wind. The quantity of pollen is in these cases enormous ; the anthers are frequently attached very slightly to the end of elongated filaments, so that the pollen is shaken out of them by the least breath of wind ; the flowers grow on the most exposed parts of the plant, frequently appearing before the leaves, so as to give greater facility for the dispersion of the pollen, and are not provided with brightly coloured corolla, powerful scent, or nectar, for the purpose of attracting insects. Plants, on the other hand, whose pollen is coherent, are dependent on insect agency for its dispersion and transport to the stigma. It is therefore absolutely essential in these cases that some means should be provided for its protection from moisture, whether rain or dew, which would immediately destroy its efficacy, until such time as it may be carried away by insects. A variety of contrivances are actually found in nature for effecting this end, which may be classified under the following heads :—1. Protection by portions of the pistil or stamens themselves, as in the petaloid stigmas of *Iris*. 2. By portions of the calyx and corolla ; this occurs in an immense variety of forms. 3. By sheaths, bracts, or foliage-leaves. 4. By periodic movements of the leaves of the perianth, as in the closing of flowers at night or in rainy weather. 5. By curvature of the axis, as in those numerous flowers the opening of which is always turned towards the ground at the period when fertilization takes place. From the examples adduced Kerner draws the general conclusion that the protection of the pollen against the injurious effect of premature moisture is the more perfect the smaller the number of flowers and of pollen-grains in the individual, the greater their degree of coherence, and the more exclusively the flower is fertilized by insect agency. In those plants where the flowering extends over a great space of time, where the anthers in the same flower vary in the period of the debiscence to allow the

escape of the pollen, and where the number of flowers in an inflorescence is very large, the protection of the pollen against the influence of the weather is reduced to a minimum, as in Umbelliferae and many species of Cruciferae and Saxifraga. When some of the anthers are placed in such a position that they are necessarily exposed to the weather, or that any protection would interfere with the ingress of insects, we find these anthers commonly suppressed, or, if present, destitute of pollen, as in *Maranta* and *Zingiber*. Finally Kerner draws the conclusion that those plants whose coherent pollen renders insect agency necessary for their fertilization can only have existed in very recent geological periods ; and those new species or varieties must necessarily have the advantage, and tend to become perpetuated, which possess superior advantages, in respect to the climate in which they grow, for the protection of their pollen from all injurious influences. The plants the remains of which are found in the oldest geological formations are generally of that class which do not require insect agency for their fertilization.

New Publications.

- BÉHIER, M. Cas de pachyméningite cérébrale. Paris : Martinet.
BOÉCHAT, P. A. Recherches sur la structure normale du corps thyroïde. Paris : Parent.
BOULLAND, L. C. De la contractilité physique et de quelques autres propriétés que présentent les tissus non vivants de l'organisme animal, et notamment de l'endosmose des gaz et des vapeurs. Paris : Baillière.
CHLEBIK, F. Kraft und Stoff, oder der Dynamismus der Atome aus Hegel'schen Prämissen abgeleitet. Berlin : Staube.
D'ACHIARDI, A. Mineralogia della Toscana. Vol. vii. Pisa : Nistri.
DENZA, P. F. Osservazioni meteorologiche con speciali istruzioni intorno a quelle pluvio-metriche. Torino : Camilla e Bertolero.
DICTIONNAIRE industriel à l'usage de tout le monde. 1^{re} liv. Paris : Lacroix.
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V. SCHLEUSING, R. Beitrag zur Integralrechnung. Die Integration einiger algebraischer und transcendenten Functionen. Berlin : Weidmann.
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History.

The Paston Letters. Vol. I. Edited by James Gairdner. (Arber's Series.)

HAD not Mr. Herman Merivale attacked the genuineness of the Paston letters it is probable that we should have had to wait for many years before we could possess ourselves of a well edited edition of what is on the whole one of the

most important links in the chain of our domestic history. Antiquaries and some few scholars had read the book, and manufacturers of popular histories sometimes quoted it; but we imagine that in the great outer world of readers there were but few who had anything better than a second-hand acquaintance with the Pastons before the question of the authenticity of their correspondence was discussed in the *Fortnightly Review* for 1865.

To anyone who had a really familiar knowledge of the thoughts of the time in which these letters were written, and of the manner in which thoughts then were wont to crystallize into homely speech, there could be no reasonable doubt that the Paston letters were what they professed to be, but on the surface the question presented many difficulties. The original manuscripts were not forthcoming, and no very satisfactory account of them was to be had, and then there were scattered up and down, sparingly it is true, but still in sufficient numbers to be very startling, colloquialisms which it has been the custom to believe of a much more modern date. It is certainly strange to meet with a knight of the fifteenth century talking about certain fighting men in Caistor Castle as "*gentlemanly*, comfortable fellows;" and we are troubled by a sense of modernness when we hear it said of a certain lady that "Her dwelling is in London, but her mother and she came to a *place of hers*, five miles from Eton." The fact is our knowledge of past times is almost solely derived from carefully prepared literature. We have almost nothing on which literary art has not spent itself more or less in lopping and pruning. In former days, as now, common colloquial expressions or new phrases and turns of speech were jealously eyed by those engaged in book manufacture. As the correspondence of Walpole, Wilberforce, or Hannah More does not represent the common talk of their age, but only such a strained decoction of it as they thought would look seemly on paper, so even our highest and best literature does not give us a complete picture of the way men spoke when it was written, but only certain selected characteristic words and phrases carefully mounted and set among much that we may be quite sure could never have been spoken exactly in the way we have it. How needful it is to use the utmost caution before we reject anything as spurious on the ground that it contains expressions we have been accustomed to attribute to a modern period one example will suffice to prove.

If there be a single word that it would have seemed quite safe to take as a test it is that ugly bastard *reliable*. Purists are never weary of denouncing it, and though good writers and bad are now accustomed to use it no one does so, we imagine, without a certain sense of shame. It is, we are confidently told, mere "bagman's English," manufactured in the Victorian era not because it was wanted, but simply because it sounded somewhat finer than an old servant like trustworthy. So strong is the conviction in men's minds that here we have an undoubted interloper, that few of us would wish to encounter the ridicule that would follow should we publish a letter which professed itself to be a couple of centuries old in which the offending word occurred, unless we could produce the most overwhelming proofs of its genuineness. Yet that this ugly, ill-formed word was in use more than two hundred years ago is quite certain, for Richard Montagu, writing to John Cousin in 1624, says quite naturally of two friends of his who were but newly dead, "I knowe not two honester, abler men, and *reliable* indeed of their ranke and state" (*Corresp. of John Cousin*, i., 34, *Surtees Soc.*)

There can be no doubt that the English of the fifteenth century was a much freer and more elastic speech than most of us have been in the habit of thinking it, and apart from all historical and strictly philological considerations we must

regard the Paston letters as most valuable literary treasures because they teach us this. We are too apt to think that a time that has few books can have little culture, and it is a great service to us when evidence is produced which refutes so illiterate a conjecture.

As contributions to history proper the *Paston Letters* are not of extreme value. They confirm in many minute particulars statements which we have on other authority, but they do not give us much that is new. It was not to be hoped for. The private correspondence of no family, except perhaps one of the very highest, would be likely to contain secret state papers, and of that which was not secret we have already sufficient proof. The war of the Roses is a dark period not because we do not know when this or that battle took place, or who were the combatants, but because the motives which influenced action are mostly unknown to us. As a commentary on national motives these letters are instructive. The writers naturally do not preach or philosophize; but there is an undercurrent in their writing which shows how widely different an Englishman's thoughts were then to what they had become after the Tudor tyranny had consolidated the national character. No craving after liberty appears here; unjust charges are grumbled at, and the working of the law generally not considered admirable; but the complaints are such as we now make of the weather, not such as we address against an unpopular government. The idea of the divine right of kings was not understood then, but the divine right of rule, good or bad, seemed to be acquiesced in, not so much because it was divine as because there was no hope of making things better.

Of the way in which these letters are edited little need be said. Whatever appeared in the former editions is given or will be given here, with large additions from documents discovered soon after Mr. Merivale's article attracted attention to the Correspondence. All that has been before published is again reproduced in full. The new matter when important is put before the reader in full also; when of less value it is calendared after the manner followed by the Public Record-keepers.

Most praiseworthy care has been taken by the editor to arrange the documents according to their true chronology. For this labour very great credit is due, for it is a most tedious business, and beset with pitfalls at every step.

The long introduction is a careful synopsis of the history of the time, commendably free from speculations not based on record evidence, and quite free from those silly attempts at poetry and picturesqueness by which certain writers on historical subjects have spoiled their narratives and misled their readers.

EDWARD PEACOCK.

Notes and Intelligence.

The eighth number of Dr. von Spruner's *Historical Atlas* for the middle and modern ages, re-edited by Dr. Theodor Menke, has been recently issued, and contains as usual four sheets. The leaves 46 to 49 refer exclusively to German history from the days of Frederic the Great to the present time. Nothing can be more instructive than a comparison of this perfectly new work with the two first editions. All the vast mass of historico-geographical matter formerly distributed over two large maps (with five small additions in the corners) has undergone an entirely fresh arrangement both with regard to space and time. The four principal maps are surrounded by no less than forty-six minor ones, including plans and topographical illustrations. By this subdivision not only have the particulars required for the sake of distinctness been greatly advanced, but the completeness of the work has altogether attained a degree that even the scholar and the well-read historian may glean many valuable details from these excellent sheets. For the investigation of the military events and diplomatic arrangements under which the German territory has been subjected to so many changes within the course of a single century, next to the records and original documents themselves, no better assistance is likely to be met with than reading them with the eye on these collateral and successive drawings. On the first map is given Germany from 1742 to 1803—from

the Conquest of Silesia to the settlement of the Empire in accordance with the decrees of the Peace of Luneville, showing as well the various accessions to Prussian territory (chiefly acquired at the three several partitions of Poland) most carefully marked, as the electorates, duchies, spiritual and secular principalities, the free cities, the counts and knights of the Empire still left in their sovereign existence. A separate sketch illustrates the Austrian Netherlands, together with the Palatinate and the spiritual electorates of Mainz, Trier, and Köln about the year 1789. Another tablet sketches the electorate of Saxony nearly smothered by Brandenburg, Silesia, and Bohemia. The lower part of the sheet is filled up with minute plans of the principal battles lost and won by Frederic the Great. N. 47 is a special map of the South-west, including Elsass and parts of Lothringen, all the country between Coblenz and Basel, Augsburg and Nancy, both within and without the Empire, and in the hands of so many sovereigns and spiritual or municipal corporations, just before the outbreak of the French Revolution in 1789. At first sight the map appears almost bewildering, owing to so many patches, large and small, in the glare of more than thirty shades of colour, and filled with minute letterpress; nevertheless they are all systematic guides through the labyrinth of such a state of political decomposition. The centre of N. 48 is filled by a map of the state to which Germany was reduced between the years 1807 and 1815. Crippled Prussia, Bavaria nearly extended to the same size, and the smaller States continuing as members of the Confederation of the Rhine, all which territories were nearly crushed by the colossal masses of the French and the Austrian Empires. Two smaller sketches explain the condition of the country after the incorporations and secularizations of 1803 and after the dissolution of the Empire on the 6th August, 1806. Small plans of the battle-fields from Ulm to Waterloo are added on the lower margin. The chief map of N. 49 belongs to the well-known time of the Germanic Confederation between 1815 and 1866. Additional sketches produce the Duchies of Schleswig-Holstein in 1864, together with plans of the lines of Danewerk and Düppel-Alsen; the seat of war in Bohemia, 1866, together with a croquis of the neighbourhood of Königgrätz; the military geography of the Confederation, and the growth of the Zollverein since 1833, in three very instructive tablets. The student of history, the politician, and indeed every educated man, will hail the publication of these highly finished maps, the composition of which must have required an amount of research, historical, geographical, and statistical, which contracted within few degrees of longitude and latitude seems perfectly amazing.

During a considerable period the annalist, Lambert of Hersfeld (printed in *Perts, Scriptores*, vol. iii. and vol. v.), has been considered the most trustworthy contemporary historian of the great struggle between Henry IV. and Pope Gregory VII. Both German and foreign scholars vied with each other to represent him as a model of mediæval historiography. This opinion, however, was slightly shaken by a learned paper read by Ranke before the Berlin Academy in 1854; notwithstanding which Giesebrecht, *Geschichte der deutschen Kaiserzeit*, although not without certain critical misgivings, still grounds the narrative of the years 1066-1076 mainly on Lambert's authority. Since this time it has become a favourite subject of young scholars taking their degree to investigate Lambert's veracity and authenticity, not only in substance but in kind, most minutely with regard to each particular notice contained in his chief work, and in constant reference with the party animosity roused by the great contest itself. Lefarth, *Lambert von Hersfeld: ein Beitrag zu seiner Kritik* (Düsseldorf, 1871), explains numerous mistakes and wilful distortions of the truth which it is impossible to palliate from his having been a violent partisan of the rebellious Saxons. On the other hand Hans Delbrück, *Ueber die Glaubwürdigkeit Lamberts von Hersfeld* (Bonn, 1873), the latest author on the subject, annihilates with almost hypercritical acuteness the last remnant of trustworthiness. Going over once more the principal portions of the narrative step by step he comes to the conclusion, most deleterious to Giesebrecht's mild theory, that Lambert, though a rare master of the form, an excellent writer, a poet, an artist, fails altogether in the indispensable qualities of the historian. The accomplished Benedictine scholar is proved to be neither just towards the king, nor a staunch adherer to the princes, nor a faithful servant of the pope; but writing with personal spite, delights to introduce every unfounded rumour in the shape of a well-told historical fact. His narrative is nothing else but an insoluble tissue of truths and lies, so much so that henceforth every positive accusation or praise of the king, for instance, resting on the testimony of Lambert of Hersfeld requires other and better evidence before it can be taken as genuine.

It is curious to observe how the present conflict between Church and State which threatens to become more violent every day is promoting largely the study of papal history and of canon law as constantly bordering upon it. Since the remarkable book of R. Zoepffel on the Ceremonies of Papal Elections between the eleventh and fourteenth centuries (reviewed in the *Academy*, No. 38, Dec. 15, 1871) a similar work by Moritz Meyer, *Die Wahl Alexanders III. und Victor IV. (1159): ein Beitrag zur Geschichte der Kirchenspaltung unter Kaiser Friedrich I.* (Göttingen, 1871), has become better known. It is

a production of the same methodical school of critical investigation, discussing from the reports as recorded on both sides the merits and demerits of this celebrated double election. Lately the subject has been taken up again on a more general scale, correcting at the same time some details, and drawing more precise conclusions in the spirit of the canon law, in two reviews by Dr. Carl Weizsäcker, Professor of Ecclesiastical History in the Protestant Faculty of Divinity at Tübingen, which will be of great use to all who are engaged in similar researches. They are to be found in the *Jahrbücher für deutsche Theologie*, vol. xvii. 486, *Die Papstwahl von 1059 bis 1130*, and vol. xviii. 1, *Die Decretale licet de vitanda*. Last, but not least, we must not omit to draw attention to another important essay by Constantin Höfler, Professor of History in the University of Prague, *Wahl und Thronbesteigung des letzten deutschen Papstes Adrian's VI., 1522*, published in the *Sitzungsberichte der phil. hist. Classe der Kais. Akademie der Wissenschaften*. (Wien, October, 1872.) The learned author is not likely to overlook any source of materials that may be available, the Roman documents in Rinaldi or the despatches published from the Burgundian records at Brussels and the Imperial at Vienna. He has found his chief support, however, in that inexhaustible storehouse of English and European history at the beginning of the sixteenth century, the marvellous collection of Brewer, *Letters and Papers of the Reign of Henry VIII.*, vol. iii.

The publication of larger works has for some time been considerably retarded owing to the compositors' strike in the Leipzig printing offices. It has not prevented, however, the issue of Von Ranke's *Aus dem Briefwechsel Friedrich Wilhelms IV. mit Bunsen* (Leipzig: Duncker u. Humboldt, 1873), which may be called quite an unusual event. A book on such a recent period, the intimate correspondence of a sovereign who never became a friend of the progress of the age, and consequently never could be the favourite of his contemporaries, though edited by the celebrated conservative historian, would have been impossible in the world of German literature without the enormous political and social changes which will make the reign of his brother William I. ever memorable. Though the time is not come yet for a critical history of his less fortunate predecessor, it is not unlikely that public opinion will be better willing to judge more fairly about a monarch who was neither competent to rule as absolute sovereign nor as constitutional king, but who, in spite of his romantic whims, reactionary politics, and dilettante humours, was nevertheless an exceptional genius, full of noble and jovial spirit. There was a time when his sayings, witticisms, and speeches excited public attention, and when people more or less initiated used to hint mysteriously that his letters, few of which hitherto had become public property, were only to be compared with those of Goethe. At last this most extraordinary batch of them, from which several quotations are made in the well-known life of Baron Bunsen by his widow, has been published, to be sure with a certain necessary discretion due to the man himself and some other persons still alive, but on the whole with an incomparable fairness and a most excellent commentary both personal and general. Liberal and radical criticism will probably not spare the veteran historian, who is generally known only as the first authority for the sixteenth and seventeenth centuries; but even his opponents will be surprised by the consummate knowledge and terse, brisk style in which he sketches the European politics of the nineteenth century, as well as the special history of Church and State in Prussia. The correspondence with Bunsen, of which chiefly the king's letters are reproduced, extends over the years 1830 to 1857, and is grouped in twelve chapters, all alike attractive: the beginning of the friendship with Bunsen, the conflict with the Archbishop of Cologne, the ecclesiastical ideals of the Crown Prince, the Jerusalem bishopric and Frederic William's visit to England, the foundation of a feudal constitution for the kingdom of Prussia, the complication occasioned through the principality of Neuchâtel being absorbed into the remodelled Swiss Confederation, radicalism and liberalism in connection with the events of February and March, 1848, the Frankfurt constitution for Germany, the king declining the imperial crown, the Berlin House of Lords and Napoleon III., the Oriental question and the Crimean war, and the king's evangelical views in his last years.

Not only on account of some of these chapters, but from its general bearing, the book will most likely find many readers in England, and a translation may even be put side by side with Bunsen's Life and the Memoirs of Baron Stockmar. The striking contrast between the three men and the very different treatment they experience from the hands of their editors cannot but help raising the memory of King Frederic William IV. to the place really due to him in history. R. PAULI.

We are glad to notice the intended publication of the unpublished papers extant in the archives of the Benedictine Monastery dedicated to the Holy Trinity at Cava in Tyrrhenia. These papers teem with interest as regards the history of Italy. They were widely consulted by Charles Troya for his History, and have formed the groundwork of the diplomatic studies of many learned celebrities. They extend from the end of the eighth to the middle of the twelfth centuries, and are an almost inexhaustible source of information regarding public rights, manners and customs, agriculture and commerce, of the Middle Ages; at the same time they will furnish fresh information for philological study.

It is supposed they will occupy seven or eight quarto volumes of 400 pages each, which will be accompanied by chronological tables and classified indexes, throwing much light on the Latinity of the Middle Ages. Many other interesting additions will be made by way of fac-similes and autographs.

Contents of the Journals.

H. von Sybel, *historische Zeitschrift*, zweites Heft, 1873.—M. von Knonaw shows that the Chronicle of Vitoduran (J. von Winterthur) was written in the Franciscan convent of Lindau during the long and dreadful interdict which the Avignon Pope cruelly laid on Germany during the Black Death, and that the Franciscans took the side of the Emperor against the Pope.—An analysis of the political theories of Hippolytus a Lapide (*i.e.* probably the historian Philip Chemnitz) as to the German Empire follows; the view that the sovereignty resides in the Diet and not in the Emperor had much influence in the polemical discussions of the Thirty Years' War.—Von Reumont discusses some late contributions to Italian history chiefly as to the cities of the March, Ancona and Fermo, and as to Ferrante the Aragonese king of Naples, whose letters and ordinances throw light on the events of the last years of the fifteenth century.—Stumpf reviews the first volume of the *Diplomata Imperii*, edited by C. A. F. Pertz, son of the renowned editor of the *Monumenta Germaniae historica*. The son's edition of the charters of the Merovingian age is spoken of very unfavourably, and the article is almost in the nature of an indictment. A late pamphlet by Sichel, *Diplomatum Imperii, tomus i., besprochen von Th. Sichel*, arrives at similar conclusions as to the badness of the edition. There is but too much justification for the charges; though something of personal hostility to the kind of dictatorship exercised by the elder Pertz in the publication of the German Chronicles and Records is very visible, and a disinclination to see it continued in the person of his son.—A review of Stölzel's *Die Entwicklung des geltenden Richterthums in deutschen Territorien* shows how the substitution of judges trained in the Roman law for the old local authorities (*schöffen*, &c.), who decided by local custom and partly created the law which they administered, was connected with the general growth of the central authority and consequent diminution of local rights in each territory.—Zeller contributes a short notice on the argument of Lipsius' book on the legend of S. Peter at Rome.

Literarisches Centralblatt.—Feb. 1 reviews Beal's *Catena of Buddhist Scriptures*, Alabaster's *Wheel of the Law*, and Steele's *Eastern Love Story*, with deserved praise for the services English authors are now rendering to the knowledge of the real Buddhist life and modes of thought. Feb. 8 draws attention to Kiepert's new Biblical maps on a large scale, and to Schmidt's dissertation "On the method of teaching geography in schools." Feb. 22 has a further notice of Kiepert's maps, and criticises Valentin's view as to the "Venus" of Milo, that it was once combined with a statue of Mars. March 1 notices the new German edition of Rilliet's book on the legend of William Tell, and Bucheler reviews Conze's and Schöne's dissertations on Greek reliefs—suggesting several corrections of inscriptions. March 8 points out the excessively faulty character of Montault's *Musées et Galleries de Rome*. March 15 reviews Morosi's *Dialecti Graeci della terra d'Otranto*, and several modern Greek comedies, and high praise is given to Mätzner's Glossary of his *Allenglische Sprachproben*, and to Whitley Stokes' *Old and early-middle Irish Glosses*. March 22 draws attention to Lasinio's edition of the Hebrew translation of Aristotle's *Poetics*, itself translated from Averroes' Arabic translation, which is also to be published; there is nothing to be gained from the Hebrew now published. The German translation of Jonckbloet's *History of the Literature of the Netherlands* is commended. March 29 reviews Gfrörer's *History of Venice to 1084*, which is treated from the point of view of its connection with Constantinople—it is in fact partly a contribution to Byzantine history. April 5 reviews Bruhns' *Alexander von Humboldt* and Springer's life of Dahlmann—the latter contains Prince Albert's letter on the events of 1848 in Germany. Notices are given of Scheler's *Etymological French Dictionary*, and Caix's *Dissertation on the Dialects of Italy*. April 12 analyses the fourth volume of Giesebrecht's *Geschichte der deutschen Kaiserzeit*—the Hohenstauffen period, the first volume of Ascoli's *Archivio Glottologico Italiano*, and the third part of Schmitz's *Die neuesten Fortschritte der französisch-englischen Philologie*. April 19 Bucheler reviews Ulrich's *Codex urbis Romae topographicus*, and Jordan's *Topographie der Stadt Rom*. Notices follow of Ilg *Ueber den kunsthistorischen Werth der Hypnerotomachia Poliphili*, and Edelsberg's *Quellenschriften für Kunstgeschichte und Kunsttechnik des Mittelalters und der Renaissance*. April 26 contains an interesting account of Hegel's *Ludwig I., König von Bayern*, and notices the completion of Andree's *Geographie des Welthandels*. May 3 analyses Winkelmann's *Philipp von Schwaben und Otto IV. von Braunschweig*: the notices of our Richard I. contained in it are interesting. May 10 criticises very unfavourably Vámbéry's *Geschichte Bochara's oder Transoxaniens*, pointing out at great length the unsatisfactory use made of the original authorities. C. W. BOASE.

New Publications.

- ARCHIV. f. oesterreichische Geschichte. Wien: Gerold's Sohn.
 AUSWEISE ÜBER DEN AUSWÄRTIGEN HANDEL der oesterreichisch-ungarischen Monarchie im Sonnen-Jahre 1871. Wien: Gerold's Sohn.
 BABAËU, M. Albert. Histoire de Troyes pendant la Révolution (1787-1792). Paris: Dumoulin.
 BELOT, Emile. Histoire des chevaliers romains, considérée dans ses rapports avec celle des différentes constitutions de Rome, depuis le temps des Gracques jusqu'à la division de l'Empire romain (133 avant J.-C.—395 après J.-C.). Paris: Durand et Bedone-Lauriel.
 BIRCH, W. de Gray. Fasti Monastici Aevi Saxonici, or Alphabetical List of Heads of Religious Houses. Trübner.
 BLUHME, F. Zur Texteskritik d. Westgothenrechts u. Reccared's leges antiquae. Halle: Anton.
 BOEHM, W. Hat Kaiser Maximilian I. im J. 1511 Papst werden wollen? Berlin: Calvary.
 BONHOMME, Honoré. Correspondance inédite de Mlle. Théophile de Fernig, aide-de-camp du général Dumouriez; suivie du Coup d'Etat du 18 fructidor an. V., d'après le Journal inédit de La Villeumoy, agent secret de Louis XVIII., et l'un des déportés à la Guyane française, d'après les manuscrits autographes originaux, avec introductions et notes. Paris: Firmin Didot.
 BUCHBERGER, K. Briefe Loudon's. Beiträge zur Charakteristik Loudon's und der Geschichte d. 7jahr Krieger. Wien: Gerold's Sohn.
 CANDOLLE, A. de. Histoire des sciences et des savants depuis deux siècles. Basel: Georg.
 CODEx DIPLOMATICUS SAXONIAE REGIAE. Hrsg. von E. G. Gersdorf u. K. Fr. von Posern-klett. Leipzig: Giesecke u. Devrient.
 DIPLOMATUM IMPERII. Tom. I. Herausgegeben von K. Pertz. Besprochen von Th. Sichel. Berlin.
 DRESSER, A. Vier Documente aus römischen Archiven. 2 Ausg. Berlin: Duncker.
 DUGDALE, William. Index to the Visitation of the County of Yorke. Compiled by Geo. J. Armytage. Bain.
 FASTI CENSORII, quos composuit et commentariis instruxit C. de Boor. Berlin: Weidmann.
 FICKER, J. Ueber das Eigenthum d. Reichs am Reichskirchengute. Wien: Gerold's Sohn.
 GENTHE, H. Ueber den etruskischen Tauschhandel nach dem Norden. Frankfurt a.-M.: Völkner.
 GRELLEPOIS, L. Abrégé de l'histoire de la littérature française. Prag: Grégr und Dattel.
 HELFERT, J. A. Maria Louise, Erzherzogin von Oesterreich, Kaiserin der Franzosen. Wien: Braumüller.
 JACOBY, F. R. Races chevalines de France et de Belgique, leurs caractères, leur production, et leur élevage. Erfurt: Keyser.
 KRONES, F. Die oesterreichische Chronik Jacob Unrest's m. Bezug auf die einzige bisher bekannte Handschrift der k. Bibliothek zu Hannover. Wien: Gerold's Sohn.
 MAASSEN, F. E. Rede d. Papstes Hadrian II. vom J. 869.
 MONUMENTA Serbica, spectantia historiam Serbiae, Bosniae, Ragusii. Ed. Fr. Miklosich. Wien: Suppan.
 NICOLARDOT, Louis. Journal de Louis XVI. Paris: Dentu.
 PALACKY, F. Urkundliche Beiträge zur Geschichte d. Hussitenkrieger vom J. 1419 an. Prag: Tempsky.
 PERNICE, A. Marcus Antistius Labeo. Das röm. Privatrecht im ersten Jahrh. der Kaiserzeit. Halle: Waisenhauss.
 PERNICE, Dr. Alfred. Das Römische Privatrecht im ersten Jahrhundert der Kaiserzeit. (Erster Band.) Halle: Waisenhauss.
 PETER, C. Zeittafeln der griechischen Geschichte. 4 Aufl. Halle: Waisenhauss.
 PHILLIPS, G. J. Das Realienrecht in Frankreich. Halle: Waisenhauss.
 PIROGOFF, W. De Eutropii Breviarii ab u. c. indole ac fontibus. Part I. Berlin: Peters.
 QUERRY, A. Droit Musulman. Recueil de Lois concernant les Musulmans Schyites. Tom. I. and II. Paris: L'imprimerie Nationale.
 RANKE, LEOPOLD VON. Aus dem Briefwechsel Friedrich Wilhelms IV. mit Bunsen. Leipzig: Duncker und Humblot.
 REGESTA diplomatica necnon epistolaria Bohemiae et Moraviae. Pars II. Annorum 1253-1310. Opera J. Emler. Vol. 2. Prag: Grégr und Dattel.
 RICHTER, Dr. Gustav. Annalen des Fränkischen Reichs im Zeitalter der Merovinger. Vom ersten Auftreten der Franken bis zur Krönung Pipins. Mit fortlaufenden Quellenausügen und Literaturangaben. Halle: Waisenhauss.
 SCHIMMER, G. A. Statistik d. Judenthums in den im Reichsrathe vertretenen Königreichen und Ländern nach den vom k. k. Ministerium d. Innern angeordneten Erhebgn. und nach sonst. Quellen. Wien: Gerold's Sohn.
 SCHNEIDER, L. Der Krieg der Triple-Allianz (Band II). Berlin: J. Henschel.
 SCHULTE, J. F. von. Beitrag zur Geschichte d. canonischen Rechtes von Gratian bis auf Bernhard von Pavia. Wien: Gerold's Sohn.
 SÉGUR, Comte de. Le passage de la Bérézina, oder XI Buch aus Ségur's

Histoire de Napoléon, de la grande armée pendant l'année 1812. Hrsg. von F. C. Schwalbach. Leipzig: Trübner.
 SICKEL, Th. Monumenta Germaniae Historica. Diplomatum Imperii. Tom. I. Berlin: Franz Vahlen.
 STAATSARCHIV, das. Sammlung der officiellen Actenstücke zur Geschichte der Gegenwart. Hrsg. von H. v. Kremer-Auenrode. Leipzig: Duncker u. Humblot.

Philology.

Hermathena. A series of papers on Literature, Science, and Philology. By Members of Trinity College, Dublin. No. 1. Dublin: Edward Ponsonby. London: Longmans.

EVERYONE who is interested either in the advancement of learning or in the part to be taken in that work by the great Universities will welcome this publication. It is very much on the plan of the Cambridge *Journal of Philology*, except that the contributors are all members of a single foundation. The type and paper are of the same handsome character: the outside cover is in a simpler and more pleasing style. We trust that the support of a periodical of this kind will soon become one of the recognized tasks of a seat of learning, and a task none the less imperative because not prescribed by the statutes. It is desirable as a means of encouraging a kind of work which is not immediately available for teaching purposes; and it serves as a channel by which the instructed public opinion of the University may be brought to bear upon the wider body of public opinion outside.

The fifteen papers in the present volume will bear favourable comparison with those of any similar foreign periodical. They are very various in subject as well as in length and manner of treatment. Taking the three heads mentioned in the title, most of the papers would fall under the head of "Literature:" only two belong strictly to "Philosophy," and two to "Science."

The first and longest article consists of "Strictures on Mr. Luard's Edition of a French Poem on the Life of Edward the Confessor," by Dr. Atkinson, the professor of Sanscrit. The strictures are of the severest character. Experts must decide whether the general language employed in condemnation of Mr. Luard's edition is justified or not. So much is clear, that Dr. Atkinson in his review makes a large number of just observations, pointing out a satisfactory meaning in many cases where Mr. Luard had failed to do so, or restoring a sound text where Mr. Luard's was corrupt. It is obviously a different question what degree of ignorance, carelessness, or want of ability this implies on Mr. Luard's part, and it is a question to which the attention of the Master of the Rolls is imperatively called by Dr. Atkinson's paper.

Dr. Salmon's paper on "The Chronology of Hippolytus" is an example of the combination of historical with mathematical study such as it would be difficult to match. Apart from the intrinsic value of the subject, it was worth while to show by a brilliant example how much may sometimes be gained by preserving the unity of knowledge: or rather (since it is impossible to combine all knowledge) by refusing to fall in with the deep grooves to which modern specialists are so apt to confine themselves.

The twenty-five pages which Mr. Davies contributes "On the meaning of certain Homeric words" are not without interest, but are written in a discursive and facetious strain to which we rather grudge the excellent type and paper thus consumed. The chief if not the only word discussed is ἀλφειός, "eater of barley meal:" the point being that baking was unknown in the times described by Homer. This curious conclusion is made highly probable—to say the least—by Mr. Davies.

Mr. Palmer's article "On Paley's *Propertius*" is directed especially to show that the corruption of the text of *Propertius* has been underrated. The emendations proposed are thoroughly well considered, and often very skilful. But it is impossible to give a fair account of them by the *ex pede Herculem* method. The same may be said of Mr. Tyrrell's article "On the Letters of Cicero to Atticus," in which there are several excellent emendations and, what is often better, notes showing that previous emendations were unnecessary.

Of the shorter papers we would call especial attention to No. xii, three notes by Mr. Mahaffy on Aristoph. Eq. 258-265, Eur. Med. 68, and Tac. Ann. xi. 29. In each of these places the reader has the sense of a definite and indisputable gain to knowledge.

It is perhaps hardly fair to dismiss so considerable a volume as this in these brief and general terms; but it seemed better to give some account of its character and purpose without excluding the alternative course of dealing with particular articles more at length hereafter. Such a separate examination may be more satisfactory to the students of particular subjects, and will certainly not diminish the favourable impression produced by the book as a whole, especially by the combination of a high scientific standard with a certain vigour and fertility characteristic, perhaps, of the nation to which the writers belong.

D. B. MONRO.

UNEXPLORED SYRIA.

To the Editor of the ACADEMY.

Vienna, May 6th, 1873.

SIR,—Perhaps you will kindly allow space for a few lines upon the subject of the valuable and appreciative review in the columns of the *Academy* (March 15th, 1873).

Professor Th. Nöldeke's dogmatic criticism is truly a benefit to his author, and contrasts favourably with the æsthetic compound which passes as a review in England, and which we are so often doomed to swallow. It justifies the motto "*Inter silvas Academii*," &c. But there are certain details in the review which the reviewer will, I am sure, be pleased to see reviewed, and which may, moreover, perhaps interest a certain portion of the public.

One is surprised to see a learned Orientalist with so little practical knowledge of El Islam as to write as follows: "It might at the outset be questionable to entrust a man with the care of English interests in Syria, of whom it could not remain a secret that he had committed that terrible offence in the eyes of a Muslim of having made the pilgrimage to Mecca as a Christian."

Firstly I went to Meccah not as a Christian, but as a Moslem. Secondly the popular Moslem idea of one who has circumambulated the House of Allah, who has bowed before the tomb of the Prophet, and who has prayed in the presence of the Saints, is simply that, however Giaour-like be his after-life, the heart cannot but have been touched, and the conscience will not fail to speak. The perfume of such sanctity, to use their own phrase, must still dwell in the sensorium of the pilgrim's soul, and its influence must, sooner or later, lead him into the path which is straight. And permit me to state, contrary to the usual opinion, that no religionists with whom I am acquainted are more tolerant than the Ulema, the really learned Moslem divines. When the Amir Abd el Kadir, who now lives a priestly life, heard of my visit to El Hejaz, his only remark was, "If he has done so, is the Holy Land in any way the worse?" He honoured me with his friendship, and our intimacy lasted till I left the country.

The truth is that Damascus was looked upon as a desirable post, as a kind of promotion, being political and not commercial. My ability to hold it was misrepresented accordingly. Looked upon as a prospective victim to Arab fanaticism, I had much trouble in explaining the true

state of the case to those in office. I represented that my difficulty would be the reverse of what was published, that the Moslems, not the Christians, would expect to be the favoured party at the British Consulate, and that, though it would be easy to do justice, it would not be easy to avoid exciting jealousies. So indeed it proved. The Moslems had no feeling against me. This was shown by the visits of the chief divines from the great Amawi mosque, where my wife was admitted at the prayer-hours, and where after my sudden recall a public "function" was held for my return. The Christians also, after a time, learned to believe in my impartiality, as a number of documents in my possession may prove.

M. Nöldeke offers a suggestive idea in the following lines: "The only question that remains is, how to explain the wide prevalence of such a view" (namely, the notion of gigantic stature among primitive nations) "on psychological grounds." This is hardly the place to attack a subject of such importance. But I may briefly record my impression that physical size, being everywhere associated in man's young mind with the force, the greatness, and the majesty which lead to respect and adoration of the chief and the king, the forefathers of all races became material giants to their posterity. Thus Adam's head touched the lowest heaven, and, to mention no others, Moses was a Titan. Hence also the almost universal symbol of horns.

M. Nöldeke is kind enough to regret that I have not spoken at greater length about the modern inhabitants of Syria. His highly interesting subject has been reserved for a future work, "Personal Experiences in Palestine and the Holy Land." I am delaying it purposely, in order to write with temper and calmness upon a subject which for me still has no small share of excitement. The same must be said about the results of Protestant and Catholic missions in the nearer East. And I shall certainly not recommend the substitution of any "native Government" for the Turkish: with M. Nöldeke my trust is in a more energetic policy on the part of England, and in a Euphrates Valley Railway that will create material and commercial interests for her and will form a base-line upon which her beneficial influence can be massed. Foreigners, reading the ignorant trash talked in the House of Commons, and seeing the front of brass with which the Mesopotamian Valley is declared "never to have been civilized," must despair of seeing the latter measure carried out. Not so the Englishman. We have waited patiently since 1834, and still we are strong to wait. The next Indian mutiny shall end our long waiting and the policy which will have caused it.

I am perfectly aware that Arabic, modern and colloquial, and even classical and mediæval, is far from sufficient for interpreting proper names in Palestine, and that Syria, especially the Libanus, still preserves many derived from Aramaic and other Semitic dialects. But I have always tried to supplement my "linguistic failings"—which ought to have been specified by M. Nöldeke—by consulting the best living authorities, and I have generally recorded the philological explanations of these experts. At Damascus I was assisted by the well-known scholar Dr. Meshaka, and, not to mention a host of others, by the Syro-Catholic bishop, Matrán Ya'akúb. Amongst the Druzes I consulted the highest "akkáls" (illuminati), and in the interior I never failed to apply for interpretation to the Bedawin. The peasants' tradition, we see, confirms that of the learned geographer Yáqút. If M. Nöldeke will kindly point out a few "failings," in a definite and not in a general way, I will tell him whether they are my work or that of my friends. If I have over-estimated *Ancient Faiths embodied in Ancient Names*, it was with the specific object of drawing attention to a work which has been unduly neglected by our public, and which even the reviewer characterises as "well-intentioned." There are certain nuances in English feeling which are not understood and which cannot be understood out of England.

About the Hamah stones I am happily able to differ *to o coelo* from M. Nöldeke, who asserts far too hastily that "there is not the remotest chance of our being able to decipher the entirely unknown characters in which they are written." By the kindness of Ritter A. von Kremer a copy was sent to M. Reinisch, the highly distinguished Egyptologist and Oriental Professor at the University of Vienna. This gentleman

has informed me personally and by letter that, though he cannot find, with the Reverend Dunbar I. Heath, the cartouches of Thothmes and Amenophis, the form is undoubtedly alphabetic, and that he does not doubt his power of deciphering the legends. He merely wishes to finish his present work (*Der einheitliche Ursprung der Sprachen der alten Welt*) and to collect the latest additions to the alphabet. The Rev. Mr. Heath, speaking of the Moab door-post, assures us (*Journal of the Anthropological Institute*, January, 1873, page 33) that out of nineteen distinct characters he has found no less than five identical with five out of the forty-five Hamath characters.

With respect to the Oriental and other inscriptions appended to *Unexplored Syria*, I cannot here enter into the lengthy explanations which would perhaps modify M. Nöldeke's judgment; and my friend Mr. Vaux, who kindly lent a few hours of his valuable time, may be left to vindicate his "thoroughly unsatisfactory work." Happily I have preserved all the original transcripts made by Mr. C. F. Tyrwhitt-Drake and myself: if M. Nöldeke will favour me with his address I shall be happy to let him inspect them.

Upon the subject of the Mesha Stele the author and the reviewer will probably keep their own opinions. I find the Moabite inscription to read like history, and the Book of Kings to represent the romance of history. Let the reader judge for himself whether the discrepancies be few or many and momentous—he can decide as well as either of us. But M. Nöldeke certainly underrates the number and the importance of that majority which in England is guided or rather is governed by purely "dogmatic considerations." Otherwise he would hardly have asked, "What is the good of repeating the tirades of the Abbé Richard against the high antiquity of the human race?" The Abbé's theories are at this moment being supplemented by M. F. Chabas. Lord Arundell of Wardour's *Traditions principally with reference to Mythology and the Law of Nations*, in which extensive reading and candid sincerity combine to vindicate the "historical account of the human race," may prove that however settled the question may be considered in Germany, many Englishmen still hold it to be *sub judice*. I for one am happy to see such books, as they teach us where to *frapper toujours et frapper fort*. But again we must not expect the Saxon to legislate for the so-called Anglo-Saxon.

In conclusion I would once more offer my best thanks to M. Nöldeke for his valuable review, and assure him that I shall look forward to deriving instruction from his pen when he notices my next work on Syria and Palestine.

RICHARD F. BURTON.

[We have pleasure in inserting this reclamation, and could wish that all statements of the kind were expressed in as conciliatory a tone. It is however obviously impossible for us to invite Captain Burton and his reviewer to a discussion of points of Semitic philology in our limited space.—ED.]

Intelligence.

The first fascicle of a new periodical, called *Mélanges d'Archéologie Égyptienne et Assyrienne*, has been published at Paris. It will be for France what Lepsius's *Zeitschrift für Ägyptische Sprache* is for Germany, with the advantage of being larger in size and of placing cuneiform discovery on an equal footing with Egyptology. De Rouge was intended to be the chief editor; and the Introduction, as well as the *résumé* of a course of lectures on the monuments of Karnak by this lamented scholar, will be read with great interest. Perhaps we might disagree with some of the geographical identifications put forward; but Egyptian students have always been daring in this matter. Another valuable paper on certain monuments of the reign of Tahraka is also contributed by the late Vicomte. There are besides a good essay on the name and use of iron and loadstone in ancient Egypt by Devéria, and a monograph on a Greek inscription from Memphis by E. Miller and Mariette-Bey. Two Assyrian papers come from Oppert and Lenormant. The first describes a cuneiform inscription which the writer has found in the Museum of Zürich, and which he shows to be dated in the reign of the Parthian king Pacorus, the contemporary of Domitian. This conclusion is confirmed by Mr. Smith's recent discovery of other tablets dated in the Parthian period, which bring down the use of the cuneiform characters to a comparatively late era. The translation of a curious Persian cylinder legend is added. Lenormant's contribution is a part of the text which gives the

story of the descent of Allat into Hades, together with a transliteration. The contents of the first number guarantee the soundness and excellence of the publication, and it has our best wishes for its success.

The success of the *Daily Telegraph* expedition to Assyria and Babylonia, under the control of Mr. George Smith, is eminently gratifying. A telegram dated April 26th announces explorations of the country from Mosul to Hillah and Tel Ibrahim and the discovery of about eighty new inscriptions. A letter published in the *Daily Telegraph* of May 14th, within two days before the commencement of systematic excavations, describes the inscriptions already obtained by purchase or from the surface of the ground. The most important of these is a tablet belonging to Rimmon-nirari (B.C. 1350), which is dated in the Eponymy of Salmanurris, showing that an official chronological record was kept at this early period, and that the dates therefore assigned to ancient events in the later inscriptions may be safely depended upon. Another monolith increases our knowledge of the Cassite dynasty which ruled over Babylonia from the sixteenth to the thirteenth centuries B.C., and we find that the intermarriages between these kings and the royal family of Assyria had introduced Semitic names among them. The monarch to whom the monolith belongs is Merodach-Baladan, son of Mili-Sikhu, and grandson of Curi-galzu, and its purport is to reward the panegyrics of a court-poet with a present of land. Some other valuable inscriptions belong to the Parthian period, thus bringing down the use of the cuneiform system of writing to a comparative late epoch, and confirming Dr. Oppert's recent discovery (already noticed in the *Academy*). They refer to two eras, one Parthian and the other Greek, and all contain the name of Arsakes. Mr. Smith's last telegram was sent from Mosul, May 19th. He has been exhuming the Royal Library of Nineveh, and has found not only Syllabaries and other bilingual tablets of great value, but also the missing portion of the Deluge-story. In his letter he had stated that he had already discovered part of a series of early Babylonian legends, which may throw much light on the history of primitive religious thought and civilization in Western Asia. It is to be hoped that Mr. Smith will be allowed to continue his researches, the first fruits of which have produced such highly important results.

In Emanuel Deutsch Semitic philology has lost one of its most promising scholars and culture one of its most finely tempered instruments. Unfavourable circumstances and of late declining health prevented Mr. Deutsch from realizing the high expectations of his friends, but of his rare capacities there was but one opinion among those who knew him best. His eloquent essays on the Talmud and Islam in the *Quarterly Review* revealed the gifted interpreter between science and general culture. But the monument of his life was to have been a great work on the Talmud, fragments of which, it is to be hoped, may yet be published. Next to the Talmud Mr. Deutsch was most interested in Phœnician studies. He contributed a slight but characteristic notice of Schröder's *Phœnische Sprache* to an early number of the *Academy*, and was indirectly concerned in editing the Phœnician inscriptions of the British Museum. He was also among the first to recognise in the columns of the *Times* the importance of the discovery of the so-called Moabite stone. Mr. Deutsch was on his way home from a journey to Egypt, undertaken for the recovery of his health.

A well-known historical critic (A. v. G.) gives a somewhat severe review of Vambéry's *Geschichte Bochara's* in the *Lit. Centralblatt* for May 10. He describes the book as pretentious and uncritical, and desiderates a more complete examination of the original authorities.

Mr. R. Hassoun, a clever Oriental printer, has brought out in improved Arabic type the *Divân of Hâtîm Thâÿi*, a contemporary of Nâbigha Dhobyânî. It may be had of Messrs. Trübner & Co.

Dr. Güdemann, rabbi at Vienna, will shortly publish the first part of an important work on education amongst the Jews in the Middle Age. This part will comprise the Jewish schools in Spain, in which were composed the most interesting works in all branches of Hebrew literature. This publication, which contains a great number of unpublished documents, is sure to fill up a gap in the history of school education. Indeed the most erroneous notions on mediæval Jews' instruction have been given in the most recent histories of the subject. Dr. Güdemann's book is written in a very fluent style, and will therefore be accessible even to those who are not acquainted with the idioms in which the documents on the subject are written.

The Rev. Dunbar I. Heath gives in the *Journal of the Anthropological Institute*, vol. ii., p. 331 sqq., a transcription with a translation of two inscriptions on jars found by Mr. Shapira in the land of Moab. Prof. Schlottmann of Halle has done the same in the *Morgenländische Zeitsch.*, vol. xxvi., p. 393 sqq. Mr. Vaux, in his report to Mr. Besant, dated the 12th of April, 1873, has declared the Shapira inscriptions to be a bad forgery from the paleographical point of view, and we completely rely upon his authority. Anybody who has only the slightest notion of Hebrew and who has glanced for a moment at the famous Moabite inscription—the language of which is so close to Hebrew—will be astonished to find that, according to Mr. Heath's translation, *י* means *in* and *by*, *חן* such, *חנן* may he be gracious, not to speak of proper names like *Hachnasho*, *Dahak Cosbo*, *Nataracu*, &c. Mr. Heath has wisely abstained from justifying his translation; and he had

better have followed the same method for the words *amach* and *omt*: the former means *devoted*, as in Egyptian; the latter is the Hebrew root *DS*, *with*, and the feminine suffix (perhaps Mr. Heath means the formative *ן* for feminine nouns) compared with the Hebrew word *umash*, "corresponding," and on this ground *omt* is translated by *unity*! But the chief prize of his raid into philology is the explanation of *omt*, which becomes, by an easy transition, *imo*, and is then connected with the Hebrew *thummim* and the Egyptian *matu*. By such a method we would undertake to explain Aristotle out of a Hebrew Lexicon. And what a wonderful addition to comparative mythology in the phrases: "who in the might of her knowledge has been incorporated with Mesha (this word signifies according to Mr. Heath, p. 339, a locality, and not the famous King Mesha); she is united with Hachnasho, in Mesha; she is united with knowledge, raised to unity with Daocash!" A. N.

The numbers of the *Phoenix* for January and February contain several reprints of papers from the journals of learned societies, &c., such as "Bibliographical Notes on Chinese Books," by W. F. Mayers, from *Notes and Queries on China and Japan* for 1867; "On the Colonisation of the Himalaya by Europeans," by B. H. Hodgson, from *Selections from the Records of the Government of Bengal*; under the title of "On the Tribes of Northern Tibet," we recognise also another paper by the same writer which appeared in the *Journal of the Asiatic Society of Bengal* for 1853 under the heading of "Sifan and Hórsók Vocabularies," &c.; an "Itinerary from Phari in Tibet to Sassa," by Dr. A. Campbell from the same society's journal for 1848; and a resumé of a lecture recently delivered at Hongkong on Fung-shuey by Dr. Eitel from the *China Mail*. Beyond these Mr. Howort contributes a paper on the life of Ogotai Khakan, the founder of the Yuen, or Mongolian Dynasty in China, which will be read with interest at the present time, presenting as it does a vivid picture of the sway once exercised by a descendant of Jingis Khan from Corea to Moscow. "A Glance at Education in British Burma," by H. A., gives a satisfactory account of the means at the disposal of even the poorest Burmese for acquiring a knowledge of the literature, such as it is, of the country. In the "Relations of China with Badakhshan and the Afghans" Mr. Mayers gives an interesting sketch of the campaign undertaken by the Chinese Emperor Kanghi to consolidate his power in his newly acquired territories of Ili and Turkestan. The editor contributes a "Note on the Burmese Language," and to his pen probably are to be attributed the *Reviews of Books*, &c., at the end of each number.

Contents of the Journals.

Archæologia Cambrensis. January, 1873.—"The Old-Welsh Glosses on Martianus Capella." [Edited by Stokes; a most important contribution to our knowledge of Old-Welsh.]—"On some of our British Inscriptions." [By John Rhys, who tries to show that British inscriptions are not rightfully claimed by the Irish, and attempts to interpret some of these venerable documents.]—"The Bridell Stone" discussed again by Brash, who maintains his former reading against Ferguson.—April, 1873.—"Llondoverium: its geographical position, and reasons for assigning it to Llandoverly;" by William Rees [who succeeds to make a very good case for Llandoverly].—"Studies in Cymric Philology (No. ii.)" by Evander W. Evans. [This is an excellent paper and raises the hope that not a line of the Gwawdodyn will long remain unintelligible.]—"Our British Inscriptions." [Continued by John Rhys, who endeavours to show the groundlessness of the Irish claim to the Penrhos Llugwy inscription.]—"Original documents" [continue to add greatly to the value of this journal.]

New Publications.

BOTZON, L. Sur le langage actuel de Paris. Frankfurt a. O.: Harnecker.
BURNELL, A. C. The Vamcābrāhmaṇa (being the eighth Brāhmaṇa) of the Sāma Veda. Edited together with the Commentary of Sāyana, a Preface, and Index of Words. Mangalore: Basel Mission Press.
BURSIAN, Conrad. Geographie von Griechenland. Leipzig: Teubner.
DOBBERT, E. Ueber den Styl Nicolo Pisano's und dessen Ursprung. München: Ackermann.
EL MUBARRAD. Kamil. Edited by Prof. W. Wright. Part 9. Williams and Norgate.
FLACH, H. Die Hesiodische Theogonie, mit Prolegomena. Berlin: Weidmann.
FRITZSCHE, Th. De interpolationibus Horatianis. Berlin: Calvary.
GRIMM, J. und GRIMM, W. Deutsches Wörterbuch. Fortgesetzt von M. Heyne, R. Hildebrandt, und K. Weigand. 5 Bd. Leipzig: Hirzel.
HELBIG, H. De dialecto Cretica quaestiones grammaticae. Plauen: Homann.

- KEHREIN, J. Lateinische Sequenzen d. Mittelalters. Mainz : Kupferberg.
- KOHLMANN, Ph. Neue Scholien zur Thebais d. Statius. [Aus e. Pariser Handschrift]. Berlin : Calvary.
- KURCHAT, F. Wörterbuch der litauischen Sprache. Halle : Waisenhaus.
- LASINIO, T. Il commento medio di Averro alla Poetica d'Aristotile. P. I. Testo arabe. Turin : Loescher.
- MUIR, J. Original Sanskrit Texts on the Origin and History of the People of India. Trübner.
- PERÉAZ, E. Des transformations du langage en Angleterre. Schaffhausen : Brodtmann.
- PRAETORIUS, F. Neue Beiträge zur Erklärung der himjarischen Inschriften. Halle : Waisenhaus.
- REINISCH, L. Aegypt. Chrestomathie. Lief. I. Wien : Braumüller.
- SCHAEFER, H. W. Die Astronomische Geographie der Griechen bis auf Eratosthenes. Berlin : Calvary.
- SCHULZE, M. Indogermanisch, Semitisch, u. Hamitisch. Berlin : Calvary.
- SCHNEIDEWIND, Edm. De carmine Theocriti quod dicitur aeolico tertio. Eisenach : Bacmeister.
- STUEDEMUND, W. Studien aus dem Gebiete d. archaischen Lateins. Berlin : Weidmann.
- TEICHMÜLLER, G. Aristotelische Forschungen. III. Geschichte d. Begriffs der Parusie. Halle : Barthel.
- TITUS LIVIUS. Ed. Madvig et Ussing. Leipzig : Weigel.
- WILKEN, E. Die Ueberreste altdeutscher Dichtungen v. Tyrol und Fridebrant. Paderborn : Schöningh.
- WILKEN, E. Ueberreste altdeutscher Dichtungen in Tirol.

ERRATA IN No. 72.

- Page 187, (b) 2 lines from bottom, for "spirit" read "spinet."
- " 182, (a) 32 " " top " "Parsconete" read "Passionate."
- " 189, (a) 26 " " " "Schnikel" read "Schinkel."
- " 192, (a) 11 " " " "Schoppenhauer" read "Schopenhauer."
- " " (b) 14 " " " "a causation" read "causation."
- " " 15 " " bottom, " "la credulité des incrédules" read "la crédulité des incrédules."
- " 200, (a) 32 " " top " "in English" read "on English."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 73.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Saturday, June 14, and Advertisements should be sent in by June 10.

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JOHN ROBSON, B.A.,
Secretary to the Council.

UNIVERSITY OF LONDON.

Notice is hereby given, that the next Half-yearly Examination for MATRICULATION in this University will commence on Monday, the 30th of June, 1873. In addition to the Metropolitan Examination, Provincial Examinations will be held at Owens College, Manchester ; Queen's College, Liverpool ; St. Cuthbert's College, Ushaw ; and Queen's College, Birmingham.

Every Candidate is required to transmit his Certificate of Age to the Registrar (University of London, Burlington Gardens, London, W.) at least fourteen days before the commencement of the Examination.

Candidates who pass the Matriculation Examination are entitled to proceed to the Degrees conferred by the University in Arts, Laws, Science, and Medicine. This Examination is accepted (1) by the Council of Military Education in lieu of the Entrance Examination otherwise imposed on Candidates for admission to the Royal Military College at Sandhurst ; and (2) by the College of Surgeons in lieu of the Preliminary Examination otherwise imposed on Candidates for its Fellowship. It is also among those Examinations of which some one must be passed (1) by every Medical Student on commencing his professional studies ; and (2) by every person entering upon Articles of Clerkship to an Attorney,—any such person Matriculating in the First Division being entitled to exemption from one year's service.

WILLIAM B. CARPENTER, M.D.,
Registrar.

May 26th, 1873.

THE DEGREES OF MARBURG UNIVERSITY.

Some time ago it has come to our notice that

many persons in England call themselves Doctor of Philosophy on account of diplomas supposed to be conferred by the Philosophical Faculty of the University of Marburg. To encounter any doubts in this respect, I declare in the name of that Faculty that only six Englishmen have been created Doctors of Philosophy in our University since the year 1848. The names of those are :

EDWARD FRANKLAND, from Lancaster (23rd Aug., 1849).
JOHN TYNDALL, from London (5th March, 1850).
THOMAS ARCHER HIRST, from Yorkshire (9th Aug., 1852).
FREDERICK GUTHRIE, from London (30th Aug., 1855).
Professor D'ALLEMAND, i. St. Helens (27th Feb., 1856).
EDMUND ALWIN COOK, from London (22nd Aug., 1865).

(Signed) LEOPOLD SCHMIDT.

The Dean of the Philosophical Faculty of the University of Marburg.
Marburg, 20th March, 1873.

THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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REGISTERED FOR

SATURDAY, JUNE 14, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Zoological Mythology; or, the Legends of Animals. By Angelo De Gubernatis, Professor of Sanscrit and Comparative Literature in the Istituto di Studii superiori e di Perfezionamento at Florence. 2 vols. London: Trübner & Co. 1872.

THE author of this book is already very favourably known in his own country and elsewhere by various learned and dramatic works, while the periodical *Rivista Contemporanea* of which he is the conductor enjoys a wide circulation. In the first class may be instanced his essay on *The Vedic sources of epic poetry*, and *The comparative history of bridal customs amongst the Italians and other Indo-Germanic nations*; amongst his dramas the most noticeable are *Roderick the last king of the Visigoths*, *Pierre de la Vigne*, *The Death of Cato*, and more particularly *King Nal*, all of which have been produced on the stage with great success, and some published in several editions. The latter drama, acted before a crowded audience in Florence on April 10th, 1869, has been translated into German by the poet Friedrich Marx (Hamburg, 1870). Gubernatis has also published a very valuable collection of tales (*Le Novelline di San Stefano*, Turin, 1869), which was accompanied by an introduction on the relationship between the myth and the fairy tale. The direction which his researches have principally taken, as well as the outline of their results, was plain from this and his other scientific works. The Vedas were his starting point, and in them, like other recent writers, he believed that the basis of most of the mythological conceptions traceable in the religion, the legends, and the popular tales of the Indo-Germanic nations was to be found. This view appears as the foundation of the work before us, for which the author, as we have seen, had prepared himself by very various studies, while their nature makes itself felt in a double direction, by comprehensive erudition and a bold flight of imagination, leading sometimes indeed further than he may himself intend, and sometimes revealing to him things that are invisible to a more unbiassed spectator. But we must in justice admit that very few inquirers avoid the danger, when they once have adopted a system, of trying to force everything into harmony with it, so that even when it is sound in itself, much irrelevant matter is urged in its

support. Gubernatis himself is well aware of this, as he says at the end of the work: "The principal error into which the students of the new science (of comparative mythology) are apt to fall, and into which I myself have sometimes been betrayed in the course of this work, is that of confining their observations to one special favourite mythical point or moment, and referring almost every myth to it, and not taking sufficient account of their mobility and their special history, that is, of the various periods of their manifestation. One sees in the myth only the sun, another only the moon in its several revolutions, and their Amours with the verdant and resplendent earth; one sees the darkness of night in opposition to the light of day, another the same light in opposition to the gloomy cloud; one the loves of the sun with the moon, another those of the sun with the aurora. These diverse, special and too exclusive points of view, from which the myths have hitherto been generally studied by learned men, have afforded ill-disposed adversaries an opportunity of ridiculing the science of comparative mythology as a science which is little serious, and which changes its nature according to the student who occupies himself with it. But this opposition is disarmed by its own weapons. For what does the concord of all learned men and scholars in this department prove? It proves, in my opinion, but one thing, and that is, the reproduction and confirmation of the same natural myths under multiplex forms, the representation by analogous myths of analogous phenomena, and that the variations met with in fairy tales are also found in myths." Gubernatis, I should add, does not depend solely and exclusively upon the Vedas, but observes himself (i. xii.): "As it would be unwarrantable to say that Sanscrit contains in itself all the European forms of language, it would be equally rash to assert that the Vedic hymns contain all our mythology. In them we only look for ancient and authentic proofs to demonstrate how, before the dispersion of the Aryans, certain essential myths were formed, and the norm or law of development of these being proved it will then be possible to reconstruct even the history of those that remain by analogy, and by employing the corresponding materials of the various popular literatures, including the Hindoo literature itself, which followed immediately after the Vedic, where we find legends and mythical notions which sometimes enable us to clear up and complete several

obscure Vedic passages, as well as sometimes offer us new myths of which none of the Vedic hymns that have come down to us preserve any trace. . . . All this abundance of mythical tradition having passed into the Hindoo literature gives it an especial importance as a means of comparison; but as, notwithstanding this exuberance of legendary literature, many myths have disappeared entirely from the Hindoo tradition, we must acknowledge that India . . . cannot serve as the sole concentric type for all comparison. In some respects the Hellenic mythology and in others the Slavonian, Scandinavian, and German traditions offer far clearer evidences and display far more extensively the mythic motive (or original principle) which they possess in common with India; in some cases (as already remarked with respect to language) the Indian element is absolutely wanting in the myth, whilst the European manifests extraordinary vitality and expansion." We see that though the Vedas serve as the starting point for Gubernatis' researches, his glance takes in a wide range beyond; and in this he is perfectly right. Especially with regard to the later Hindoo literature I am able to agree with him from the most profound convictions; on which point see also Julius Braun, *Naturgeschichte der Sage*, Munich, 1864, ii. 410, 419.

Before proceeding further it will be well to give an idea of the contents of the *Zoological Mythology*; it falls into three divisions, of which the first, discussing the "animals of the earth," is the most extensive, occupying the whole of the first and part of the second volume, while the remainder is devoted to the "animals of the air" and those of the water. The inequality of the different parts does not presumably result from an inferior abundance of material for treating birds and fishes; but more probably from the author's having imposed limits on himself, as may be seen partly in the arrangement of the first section, for out of the 600 pages (in fourteen chapters) on the animals of the earth, the first alone on "The Cow and the Bull" takes up 283 pages. From this chapter, which it will be interesting to consider more in detail than the others, we can see what was the original plan, subsequently curtailed, for all. Sect. i. The Cow and the Bull in the Vedic Hymns. Sect. ii. The worship of the Bull and of the Cow in India, and the Brahmanic legends relating to it. Sect. iii. The Bull and the Cow in Iranian and Turanian tradition. Sect. iv. The Bull and the Cow in Slavonic tradition. Sect. v. The Bull and the Cow in the Germanico-Scandinavian and Franco-Celtic tradition. Sect. vi. The Bull and the Cow in Greek and Latin tradition. The other chapters are handled more compendiously, no doubt because the author was afraid of making the work too voluminous, and also because, having once set forth his fundamental theory at length, its further application might be left to the reader, assisted by occasional indications as to the bearing of the facts alleged. With reference to his task Gubernatis observes (ii. 427): "I have had to prove in mythology its most humble aspect, that is to say, the God enclosed in the animal; and inasmuch as amongst the various mythical animals which I have endeavoured to describe, several preserve the resplendent and propitious form of the god, they are generally considered as the form which the deity assumes either to feed secretly upon the forbidden fruit, or to fulfil a term of punishment for some fault of his; in any case these forms never serve to give us a superlative idea of the divine excellence and perfection." But it is not only gods that take the form of animals, the most various natural phenomena undergo the same transformation; and with reference to this peculiarity and the "primitive domain of the myth" Gubernatis has the following remarks (i. xv.): "Although the first book bears the title of animals of the earth, the second animals

of the air, and the third animals of the water, there is but one general domain in which all the animals of mythology are produced, and made to enact their respective parts. This domain is always the heavens; whilst the time during which the mythical action lasts is always subject to many variations, being now the day of twelve hours, now that of twenty-four, now the three watches of the night; at one time the lunar month of twenty-seven days, at another the solar month of thirty; sometimes the year of twelve solar, and sometimes that of thirteen lunar months. The drama of mythology has its origin in the sky; but the sky may be either clear or gloomy, it may be illumined by the sun or by the moon, it may be obscured by the darkness of night, or the condensation of its vapours into clouds. Again, the clear heavens assume at times the appearance of a milky sea, this appearance gives rise to the idea of the cow, and hence the most splendid aspects of the sky are often represented as herds or flocks. The god who causes rain to fall, who from the highest heaven fertilizes the earth, takes the form now of a ram, now of a bull; the lightning that flies like a winged arrow is represented now as a bird, now as a winged horse; and thus one after another all the shifting phenomena of the heavens take the forms of animals, becoming at length, now the hero himself, now the animal that waits upon the hero, and without which he would possess no supernatural power whatever. . . . On the other hand, the cloudy or the dark sky assumed in the myths the aspect now of a grotto or den, now of a stable, now of a tree, a forest, a rock, a mountain, an ocean, and linguistic analysis shows how natural such equivocal meanings are; and these having once taken root, it was still more natural to people the grotto with wolves, the stable with sheep, cows, and horses, the tree with birds, the forest with deer and with boars, the rock with dragons who keep guard over fountains and treasures, the mountain with serpents and aquatic monsters. In a stanza of a Vedic hymn to the gods Indra and Agni, composed with the greatest artistic elegance, the poet sings how the two gods fought side by side for a common conquest, which takes the different names of cows, waters, regions, light, and ravished dawns."

I have let the author describe his work in his own words, from which it is easy to see how extensive is the field upon which he has entered, and how easy it must be, even if his main theory is correct, to go astray in some of its applications, when one and the same conception (for instance, the cloudy sky) is supposed to be represented by the most various objects; and this, indeed, he admits himself. Tylor too, a most cautious and thorough investigator, though favourably inclined to the theory, observes concerning it (*Primitive Culture*, i. 287): "At the same time it must be clearly understood that the truth of such a general principle is no warrant for all the particular interpretations which mythologists claim to base upon it, for of these in fact many are wildly speculative and many hopelessly unsound. Nature myth demands indeed a recognition of its vast importance in the legendary lore of mankind, but only so far as its claim is backed by strong and legitimate evidence. The close and deep analogies between the life of nature and the life of man have been for ages dwelt upon by poets and philosophers who in simile or in argument have told of light and darkness, of calm and tempest, of birth, growth, change, decay, dissolution, renewal. But no one-sided interpretation can be permitted to absorb into a single theory such endless many-sided correspondences as these. Rash inferences, which on the strength of mere resemblance derive episodes of myth from episodes of nature, must be regarded with utter mistrust, for the student who has no more stringent criterion than this for his myths of sun and sky

and dawn will find them wherever it pleases him to seek them." Another highly competent judge, distinguished in the field of mythology not less than as poet and scholar, I mean Uhland, was still more severe upon the mythologists who like Gubernatis brought in the whole world of fairy tale to their studies; alluding to the ever living creative fancy of the people he says (*Schriften zur Geschichte der Dichtung und Sage* 8, 620): "We can receive gifts from poverty. It brings to the children of the rich the green Christmas tree of fancy from the snowy winter wood. Mythology is rich, but not so rich that its crumbs can give birth to the whole fairy world (Märchenwelt)." If I understand Uhland aright, he does not mean to exclude the *Märchen* altogether from mythology, only to oppose the extravagant tendency of some mythologists to claim for their own department every creation of the popular fancy. Gubernatis has given abridgments of a great number of Russian and hitherto unknown Italian stories, which are highly interesting in themselves and as contributions to the history of fiction; but it certainly appears as if he had often seen in them something more than is visible to an ordinary eye. Thus in giving an account of a Russian tale he says: "There was once a king who could not find a maiden beautiful enough to suit his taste. One day returning from the chase (the solar hero always meets the aurora, his bride, when returning from the hunt in the forest of night) he meets a shepherd's daughter," &c. (i. 209), and a little further on (i. 211), "This good sister Helen or Little Helen, so careful a guardian of her brother John, ends, when she conceives a passion for the monster, with becoming his perfidious persecutor. (The evening aurora is represented as a friend of the monster of night, who conspires with him against her brother the sun, and whoever observes the sinister aspect often assumed by the reddish sky of evening will find this fiction a very natural one.)" Or (p. 212) "Ivan by the help of his dwarf (or the sun grown small during the night, and perhaps also the moon) accomplishes," &c. Similarly in a Persian tale (i. 125) "A king becomes enamoured of the beauteous Mahrusa, his counsellors tear him from his love, upon which he pines away in solitude and dies. The beautiful girl unites herself to him in the grave (Romeo and Juliet, the evening aurora and the sun die together);" or in a Calmuck tale (p. 129) where six brothers are in love with a beautiful girl: "They fight for her, and, that each may have a part, end by cutting her to pieces. We already know the mythical meaning of this legend." I see here no "mythical meaning" at all, only the traces of what was once a very wide-spread legal custom, that of satisfying a number of creditors or other claimants by giving to each a part of the body of the debtor, or the object in dispute—a custom of which the Roman laws of the Twelve Tables give the earliest proof known to us, while the *Merchant of Venice* is perhaps the latest reminiscence of it preserved. Similarly in the Buddhist legend of Ceylon, Kusa Jatakaya (London, 1871), the beautiful princess Prabavati is claimed by seven kings, and her father, king Madu, to satisfy all the seven and avoid the threatened war, offers to divide his daughter into seven parts and give one to each of the pretenders:

"In seven parts will I divide her body, fresh and fair;
To each of all the seven kings will I despatch a share!
Thus will I from the town avert the woes that now impend!"

In other cases too I am unable to agree with what seems to me a forced interpretation, as when Gubernatis says (i. 225): "It is with the head of the most beautiful of the giant Hymir's oxen fastened to his hook that, in Snorri's *Edda*, the god Thor goes to fish up the immense serpent of Midgard from the bottom of the sea, and destroys it upon the seashore. (This myth, if I am not mistaken,

has the following meaning:—The head of the solar, or lunar, bull is devoured by the monster of night; this same head, tossed about, draws up, towards morning as sun, and towards evening as moon, upon the shore of the sea of night, that is on the eastern mountain, the monster serpent: thus Hanumant, in the *Rāmāyanam*, passes over to the opposite shore of the sea, crossing the body of the marine monster, which he causes to Lurist; thus Indras kills Ahi the serpent upon the mountain.)" Apart from everything else, the words quoted from the *Edda* "and destroys it upon the seashore" are inexact, and convey to the mind a false impression of the proceeding.

This brings me to another point which I will mention here, not to have to return to the ungrateful task of criticizing; the author frequently introduces subjects of which he is either not completely master, or to which he has not devoted the necessary attention; as, for instance, Northern mythology. A few examples will show my meaning. Vol. i. p. 206 we read "Odin too, as Indras and as Bhimas, at three gulps dries up three lakes of mead." In the passage of the *Edda* of Snorri referred to there is no mention of lakes, but of two jars and a kettle (tvö ker ok ein ketil). A little before Gubernatis speaks of a combat between Loki and Thor; in the *Edda* (Gylfag. 46), however, there is mention of a contest between Thor and Utgardloki, but not with Loki his own companion. Again p. 211: "Thus the Scandinavian warrior, Walkiries, has a double aspect, a good and a bad." In the Norse Mythologie or literature there is no mention of a warrior of this name; the Valkyries, as Gubernatis from other passages evidently knows, are something entirely different. i. 222: "The four oxen rush forward and drag Gefion with them into the sea, until they arrive at the land of Seelund." The original text (Gylfag. 1) runs very differently: "Gefion took from Jötunheim four oxen, which she had borne to a Jötun, and yoked them before the plough. Then the plough went so mightily and deep that the land was loosed and the oxen drew it westward towards the sea, till they came to a standstill in a sound. Then Gefion put the land down there, and gave it a name and called it Selund (Seeland)." In consequence of this misquotation what follows in Gubernatis is likewise wrong, viz., "In which it is obvious we have again the Vedic bull with a thousand horns which comes out of the sea, and the bull which carries off the maiden." And why does Gubernatis say of Gefion: "the four oxen her sons (although she is a *virgin*)"? The above passage scarcely warrants the use of the word. i. 225: "Scandinavian tradition, in the short poem on the dwarf Allwis, offers us the cornucopia in the cup formed of the defence of oxen (*i.e.* with their horns) in which the god Thor drinks hydromel . . . and this horn moreover, besides serving as a cornucopia, becomes as a golden horn the war trumpet of Odin (the Giallarhorn)." In *Alvíssmál* we find nothing of the sort, and the Giallarhorn belongs to the god Heimdall. i. 290: "In the Turkish stories of Siberia, it is upon an iron-coloured horse that the third brother . . . advances against the demon Ker Iutpa. The hero becomes the excrement of a horse and the horse a crow; the former glues the monster's lower lip to the earth, the latter suspends his upper lip to the sky. In order better to understand this strange myth, we must remember that the name of one of the Valkyries is 'mist,' a word which means excrement and fog. The fog, or frost, or rain, or dew falls to the ground, the solar horse, or the sun, rises in the sky; the monster of night or of clouds is dispersed." This would be a very hazardous interpretation, even supposing that the word *mist* in Old Norse had the meaning *excrement*: but this is simply not the case; Gubernatis has been misled by the German word *mist*, and the whole com-

bination falls to the ground. i. 421: "Thor kills his he-goats. . . His son, Thialfi, steals the thigh-bone of one of the goats," &c. Thialfi is not the son of Thor, but of the peasant with whom he lodges. ii. 6: "Thor to whom the hog is sacred." For Thor read Freyr, as Gubernatis says rightly on the next page, "The chariot of Frey is drawn by a hog" (or rather boar). ii. 87: "The four stags that stay round the tree Yggdrasill in the *Edda* and which come out of the river Hæffing." A river of that name is nowhere mentioned in the *Eddas*. ii. 111: "In the *Edda* of Saemund it is said that the Alfes are accustomed to call the trees the beautiful arms. We already know the meaning of the boy with the golden hand." The allusion is to *Alvissmál* 29 (*álfar fagrlima*), where however *fagrlimi* means "with beautiful branches." ii. 148: "The three sons of the Finns go to inhabit the Valley of the Wolf. . . . On Christmas Eve the king Helgi meets with a witch who rides upon a wolf having eagles for brides." For "of the Finns" read "of the King of the Finns" (*Völundarkv. Introd.*) and for "eagles" read "snakes" (*orma. Helgakv. Hiörvardss.*, prose to v. 30). The same mistake recurs on p. 191, where we also find: "The beautiful warrior maiden, who coming forth from the battles, rides upon an eagle." Does Gubernatis mean to translate *Vingskornir* (*Fafnism. 44*) "an eagle"? it is generally supposed to be the name of a horse. ii. 390: "In the *Eddas*, too, the serpent Lokis, who has taken the form of a horse, betrays himself by his feet." Loki nowhere appears as a serpent, though he once takes the form of a horse (*Gylfag. 42*).

These examples will suffice so far as the *Edda* is concerned, but elsewhere too Gubernatis would have done well to be more exact in his quotations, and to have relied less upon second-hand sources (like *Aldovrandi*, &c.) When he refers to the *Vedas* he always gives chapter and verse with the greatest care, and we cannot tell why he does not follow the same course always. Of what possible use is a reference to Philostratus, Diodorus, Plutarch, Pollux, *Edda*, Du Cange, Cæsar Heisterbacensis, &c., &c.? they are worthless for controlling the text, and even in the works of the greatest scholars that precaution is not to be dispensed with; we have seen that it was necessary with Gubernatis himself in the *Eddas*, or, again, in the following passages. Vol. i., p. 196, he says: "The German wild huntress of Gueroryssa . . . is represented with a serpent's tail." This is wrong, for in Grimm *Deutsche Myth.*, p. 897, we find only: "At the head of the train rides Gurorysse or Reisarova with her long tail." That Grimm also was mistaken, and that the name of the female spectre was not *Gurorysse* but *Guro Rysserova*, I have shown in Bartsch's *Germania*, xvi. 215. Vol. i. 389: "In Tzetzas (*Tzetzes*) I find again the curious notion that Midas sold his own *stercus* out of avarice, that is that he changed it into gold." What Tzetzes, however, has, is that Midas "pinched his belly and sold the food so economized" (*Ἐστένου τὴν γαστέρα δὲ, τὰ βρώματα πιπράσκων*). ii. 27: "The name of Cyrus's nurse, according to Textor, was Küna." Who Textor is I am not aware; but in Herodotus i. 110 she is called *Κυνὴ* (a translation of the Median *Σπακὴ τὴν γὰρ κύνα καλέουσι σπάκα Μηδοί*). ii. 32: "The dog in connection with a man's hand is mentioned in the Latin works of Petrarch, when speaking of Vespasian, who considered as a good omen the incident of a dog bringing a man's hand into the refectory." It would have been better to refer to Suet. Vesp. 5 instead of to Petrarch. ii. 69: "The mouse that passes over the yarn occurs again in German tradition: Gertrudenbuchlein ab: Zwei Mäuschen nagen an einer flachsumwundenen Spindel; eine Spinnerin sitzt am St. Gertrudentag, noch in der Zeit der Zwölften, wo die Geister in Gestalt von Mäusen erscheinen, darf gesponnen

werden.' Rochholtz, ut supra i. 158." This is a mutilated, perfectly unintelligible quotation, which ought to run: "So bildet sie (die heilige Gertrud) der krainische Bauernkalender so wie das so genannte Gertrudenbuchlein ab: Zwei Mäuslein nagen an einer flachsumwundenen Spindel; eine Spinnerin sitzt am Spinnrade und eine Maus läuft den Faden hinauf. Weder am St. Gertrudentag, noch in der Zeit der Zwölften," &c. ii. l. c. "It is well known how in the Hellenic fable the council of mice resolve, to deliver themselves from the cat, to put a bell round its neck," &c. This fable does not occur in any Greek fabulist or other writer: vide Oesterley on Pauli's *Schimpf und Ernst*, cap. 36; and on Kirchhof's *Wendunmuth*, 7, 105. The Scotch story of Archibald Douglas, nicknamed Bell the Cat, is familiar to every one. ii. 80: "In the twenty-first Esthonian story a silly husband is called by the name of Hare's-foot." Gubernatis has misunderstood this phrase; for in German *Hasenfuss* (hare's foot) means a coward, and in the story referred to somebody says to a henpecked husband: "You are a coward (*Hasenfuss*) and don't know how to manage a woman." ii. 153: "The lion is the steed of the hero Hildebrand." Gubernatis has again misunderstood the passage referred to (in W. Grimm's *Heldensage*); Lion (*Loewe, Lewe*) is the name of Hildebrand's steed. ii. 161: "The tiger Mantikora, which has in its tail hairs which are darts thrown by it to defend itself, and are spoken of by Ktesias, in Pausanias." For "Pausanias" read "Phot. Bibl., p. 45b Bekker," where however stings (*κέντρα*), not hairs, are mentioned. ii. 178: "Whilst *ave*; that is to say good augury, was still the solemn formula of Roman salutation, the Greeks had already turned auguries and auspices into derision." Here Gubernatis has confused the greeting *ave* (imper. of the verb *avere*) with the expression *bona ave* (*εὖνομος*). ii. 211: "The lady cow of the English has several names in Germany, . . . among others we find those of . . . little cow of women, and little cock of women. German maidens, in fact, in Upland send it to their lovers as a messenger of love, with the following verses," &c. Instead of "little cow" and "little cock of women" it ought to be "little lady cow" (*Frauenkühe, Marienküchen*) and "our lady's chick" (*unsere lieben Frauen Küchlein*). Upland, moreover, is not a German but a Swedish province. Mannhardt (*Germ. Mythen*, p. 252) gives the Swedish text of the song as well as the German translation. ii. 275: "The lark with the crest or with the tuft explains the custom of the Gauls, recorded by Suetonius in the Life of Julius Cæsar, of representing a crested cock upon their helmets." Suetonius (c. 24) has: "Ad legiones, quas a republica acceperat, alias privato sumtu addidit: unam etiam ex Transalpinis conscriptam, vocabulo quoque Gallico: Alauda enim appellabatur." Here mention is made of the name of a single Roman legion, not of a custom of the Gauls. ii. 385: "It is as a witch that the lizard is killed, in the Greek myth, by Appolines (read Apollo), whence its name of Sauroktanos (read Sauroktonos)." Where did Gubernatis find such a Greek myth? *Sauroktonos* is a name of Apollo, but not of the lizard.

These are the errors and defects which have struck me in reading the present work, and I have instanced them in detail partly to justify the strictures above pronounced, and partly to show that I have gone through the book with the greatest attention. I have therefore the better right to speak to its valuable sides, and can testify to the wide reading which Gubernatis displays in his references and illustrations, and to the remarkable number of conceptions referring to the animal world which he shows either had or may have had a mythological origin—often only to be explained by

the most ancient Indian sources. Many of his views, including some of great acuteness, will doubtless receive further confirmation, if they have not done so already, as is the case with what he says i. 257: "From what we have said thus far, it seems to me that two essential particulars have been made clear—1st, That the worship of the bull and cow was widely spread *even in northern nations*," &c. His proof of this, which is mostly theoretical, has received striking confirmation from facts given in Holmboe's treatise *Om Civaisme i Europa* (in Vid. Selskabets Forhandling for 1866, pp. 188-220, Christiania). Even when Gubernatis is mistaken (as we have seen he himself admits was likely to be the case sometimes) his errors will give occasion to further research, and so assist the discovery of the truth. The materials which he has collected are most valuable in their abundance and would have been still more ample but for the restrictions which, as has been said, he imposed on himself. For this reason I refrain from additional remarks of my own on various passages which might have suggested these, and will only instance one or two points in passing. Gubernatis says (i. 48) "A cow (probably a black one), often a black goat, was sometimes also sacrificed in the funeral ceremonies of the Hindoos, as if to augur that, just as the black cow, night, produces the milky humours of the aurora, or is fruitful, so will he who has passed through the kingdom of darkness rise again in the world of light." Without inquiring whether Gubernatis' explanation of the reason why black cows were sacrificed at the funerals of the ancient Hindoos is the correct one, the fact itself is firmly established—vide Mannhardt, *German. Mythen*, p. 734. In Westphalia it is believed that there will be a death in the house of anyone who slaughters a black cow or ox—a superstition which probably arose from the custom of doing so when a death had occurred. (The same writer in *Zeitschrift für Deutsche Mythol.* iv. 420.) This too gives the best explanation of the English superstition mentioned in *Choice Notes from Notes and Queries*, p. 20, and of the Scotch phrase "The black ox has trampled on him," which means, if I am not mistaken, "He (or one of his family) is dead." In German one says of an unlucky person: "The black cow has crushed him," or "The black ox has trampled on him;" amongst the Bohemians and Magyars: "The black cow has trod on his heels." The Kalmuck tale of Siddhi-kür (in Zülz's *Mongol. Märch.*, p. 1. "Die Knotennase"), referred to by Gubernatis (i. 131), tells of the rich and avaricious man whose poor brother goes in despair into the forest to die upon a rock. He is enriched in an unexpected manner, and is envied by the other brother, who goes to the same place in hopes of experiencing the same good fortune, but as he does not hide himself the hobgoblins see him, and believing him to be the man who stole the hammer and the sack, avenge themselves upon him by lengthening his nose and covering it with protuberances. It is interesting to meet with this story again not only in Italy (Vittorio Imbriani's *Novellaja Fiorentina*, Napoli, 1871, No. 14, "I due Gobbi"), but also in Japan (Mitford's *Old Japan*, i. 276, "The Elves and the envious Neighbour"). Gubernatis also (i. 391) takes the following notice from the curious volume *Laus Asini*, printed at Leyden by Elzevir: "Si quis graviter a scorpione ictus id in aurem insusurret asino, ex tempore curetur." Elliot (*Races of the N. W. Provinces of India*, i. 260) likewise mentions this European superstition, and adds, "In India it is also believed that if a person is bitten by a scorpion, he may be cured by the following ceremony:—A young male buffalo calf is selected, in preference to a donkey, as being a purer animal, and into its ear is whispered the following incantation (which probably has no meaning at all, at least only faint glimmerings of sense can be detected in it). . . .

When this jargon has been duly uttered by the messenger, he returns to the bitten patient, and is sure to find him duly recovered." It is not less remarkable that in a Russian tale (Gubern. i. 408) Thereshicha says that he was originally the stump of a tree which his father and mother, being childless, had picked up in the forest and wrapped up and rocked in a cradle till he was born. This corresponds to a passage in the Finnish epic *Kalevala* (Schiefner's translation, p. 131), where an unfortunate maiden wishes she had never been born, and uses the expressions that follow: "Would that thou, poor mother, that bore and suckled me, hadst given away thy milk and swathed a log and washed a little stone instead of washing thy daughter and wrapping up thy darling to come to such fulness of sorrow," &c. We find here an echo of the widely spread custom of supplying the place of a lost or wished-for child by a doll or a gourd, on which cf. Tylor's *Early History of Mankind*, second ed., p. 110. Hence perhaps may be explained the Hindoo idea, according to which all children come out of the globular gourd (Rochholtz, *Glaube und Brauch*, &c., i. 135) and the Wallachian story (Schott, No. 23) of Trandafir, who is a man by day and a gourd by night. The story of the tail-fisher to which Gubernatis alludes (ii. 113), saying, "In a popular Norwegian story the fox makes the bear catch fish with his tail, which is frozen in the water," is likewise to be met with in numerous countries: Tylor l. c. p. 364. Shortly before (ii. 112) Gubernatis mentions a Russian tale in which the peasant cheats his companion the bear twice: when they sow turnips together the peasant reserves for himself whatever grows underground, and leaves to the bear whatever comes out of the earth; when they sow wheat, the bear, thinking to be very knowing, takes for his own part what grows under, and gives to the peasant what grows above the ground. The peasant is about to be devoured by the bear, when the fox comes to the rescue. This tale, like the preceding one, is also met with in Norway (Asbjörnson, *Ny Samling*, Christiania, 1871, No. 74, 3) and in Germany (Grimm, No. 189), where the devil is the person cheated. To Grimm's references (vol. iii.) may be added a Caucasian tale (*Magazin für die Litter. des Auslands*, 1834, No. 134) where also the devil takes the place of the bear; and the old Spanish *Conde Lucanar*, c. 41, where instead of the devil vice (el mal) appears and is cheated by virtue (el bien) about the division of a field of turnips. The author of *Conde Lucanar* is known to have derived a considerable portion of his collection of tales from Arabic sources, and thus it happens that we find the incident in question in one of Rückert's poems (p. 75) from a similar source. Another Russian tale (Gubern. ii. 357), in which the crab beats the fox in a race by a trick, recurs in various forms in ancient Greece (*Æsop*, ed. Koraës, No. 287, "Χελώνη καὶ Λαγώς"), in Armenia (Vartan, No. 8), in Arabia (Lokman, No. 20), in Siam (Bastian in Benfey's *Orient and Occid.* iii. 497), and in Ceylon (Steele's *Kusa Fatakaya*, p. 257). But I will not forestall the additions which Gubernatis will doubtless make to his work in a second edition. The examples already given will show sufficiently the copiousness of the materials offered in the *Zoological Mythology*, which enlarge the horizon of mythology and general folklore in every direction, and are of interest even for the general reader; so that Gubernatis has put both the learned and the literary classes in his debt—a debt materially augmented by the excellent index which accompanies his work. FELIX LIEBRECHT.

The Intellectual Life. Hamerton. Macmillan and Co. 1873.
It is difficult to give an adequate description of a book whose value consists less in its substance than in its spirit;

good conversation is refreshing and stimulating, and yet it is often puzzling to say what it comes to. Mr. Hamerton's book is like the best conversation: we feel when we are reading that we are breathing a clearer air, which is bracing without being keen; we feel that he throws light upon topics about which few of us find it comes natural to think quietly and coherently. For most of us the plan of our lives consists of as many of the corollaries of two or three absolute (and incompatible) theories as we can find room for between the prejudices which experience has happened to leave to us and the inferences from our organization and our circumstances which experience has forced upon us. Anybody who can help us to see where we are going, and make deliberate progress through such a chaos, does us an essential service, and this is exactly what Mr. Hamerton does for us. Our feverish agitations subside in the presence of such unflinching patient cheerfulness, such ready recognition of limits, such adroit perception of issues; it is impossible to be carried away by phrases when we are protected by such an alert instinct for delicate precision of statement, such transparent candour, and by the exquisite refinement of temperance which we are inclined to think the greatest merit an essayist like Mr. Hamerton can possess. The only guarantee against some degree of triviality is to repress the temptation to make earnestness and emphasis do instead of originality until it ceases to be felt; and an author who can practise such self-denial is rewarded by a perennial flow of the observations that are too accurate to be obvious and of disinterested distinctions and of well-chosen illustration.

The book consists of letters never sent through the post to correspondents who are not imaginary, dealing with such topics as the Physical and Moral Basis of the Intellectual Life, Intellectual Hygienics, Education, the Power of Time, Custom and Tradition, Aristocracy and Democracy, and the like. There are more than seventy letters, so it is obviously impossible to give the description of these correspondents, who will now receive so many letters besides those intended specially for them, though the situations which Mr. Hamerton chooses to discuss are always suggestive, and give the discussion an air of actuality which it never loses. The subject in hand is examined with an attentive ingenuity which makes sure of every landmark which can guide the inquirer, who always is carried safely up to the point of not being perplexed by the subject, and often, though this is less important, up to the point of understanding it; for what we really want in most cases for practical guidance is not to see very far into a matter, but to see our way well out of it. For instance, the hints on forming and keeping to habits which suit the individual, in the letter to a student in uncertain health, are much more indisputably true and come much nearer to exhausting the subject than the reply "to a moralist who had said that there was a want of moral fibre in the intellectual, especially in poets and artists;" yet for practical purposes enough has been said when it has been shown that literary and artistic work requires moral courage and as much purity as is implied in self-control. It would have been superfluous to have tried to make a better case for the moralist than he had made for himself by pointing out that morality has other factors besides strenuous self-control. If a man has cultivated his intellect successfully that is a strong presumption that his self-control is decidedly above the average; it is no presumption at all that his sense of obligation is stronger, nor again that his ideal instincts find their indulgence rather in reverence than in self-complacency. As a matter of experience it might be plausibly maintained that intellectual men are prone to emancipate themselves from the duties which practical men acknowledge; it would not be paradoxical to suspect that it

is only very high knowledge indeed which tends to encourage reverence or aspiration after what is unattainable here, and that it only produces this effect upon minds of a peculiar quality. But without insisting upon these doubtful points it was possible to preach a perfectly candid sermon on the benefits of discipline and the necessity of drudgery. This characteristic candour is most conspicuous in the beautiful letters to a student in the first ardour of intellectual ambition, to an intellectual man who desired an outlet for his energies, and to a friend of a man of high culture who produced nothing. After the rapturous motto on the title page from Giordano Bruno in praise of philosophy, "*Pro qua incurrisse non piget labores, dolores, exilium, quia laborando profeci, exulando didici, quia inveni in brevi labore diuturnam requiem, in levi dolore immensum gaudium, in angusto exilio patriam amplissimam,*" it is startling to come upon admissions that ennui is the common fate of intellectual workers and that hard work is no specific against it, that many highly cultivated minds are naturally and incurably sterile, and that it is very much a matter of accident whether a cultivated mind which is not sterile finds any outlet for its energies except what the author felicitously describes as intellectual charities. Here again we note the tact with which the writer keeps the discussion to what can be acted on. He has not allowed himself to be tempted into the obvious generalizations that our desires are normally in excess of our faculties, that we are naturally capable of much more than it is physically possible that we should actually achieve, and that, limited as our available powers are, they are in excess of our opportunities, especially of the opportunities which attract us. If he had been tempted the book would have been depressing, and the fatal question,—

"Were it not better done as others use—
To sport with Amaryllis in the shade,
Or with the tangles of Neocera's hair?"

would have intruded itself importunately, for Mr. Hamerton is not in a position to silence it with reference to fame or even "the perfect witness of all-judging Jove." Nor is his own answer that faculties torment us when they exist and are not exercised entirely adequate; there is a very wide margin between the point at which a faculty is impaired by disease or becomes clamorous for employment and that at which it performs the most it can. But there is no necessity for raising questions which are unanswerable, and Mr. Hamerton's book raises the reader into an atmosphere where they seem otiose.

Readers who do not need or do not relish teaching which is as elevated as it can be without being transcendental will find much to interest them in the chapters on education, especially in the details which the author's experience suggests as to the limits and possibilities of polyglot culture. He tells an amusing story of a son of his own who learnt and unlearned Gaelic, English, and Provençal. We are inclined to think too much stress is laid upon the case of a French student of English literature who read *Claribel* as follows:—

"At ev ze bittle bommess
Azvart ze zeket lon
At none ze veeld be ommees
Aboot ze most edston
At meedneeg ze mon commess
An lokez down alon
Ere songg ze lins veet svelleveys
Ze clirvoicvire—ed mavi dwelles
Ze fledgling srost lissess
Ze slombroos vad ootvelless
Ze babblang ronnel creessess
Ze olov grot replecess
Vere Claribel lovlee—ess."

This is intended to prove the worthlessness of modern classical scholarship, and certainly it does awaken uncon-

fortable suspicions that our taste may be as much at sea as our pronunciation certainly is. But it is to be remembered that classical scholars are not so isolated like the French student; they support and control each other; our appreciation of ancient literature and ancient poetry does not differ as widely from ancient criticism and ancient feeling as his appreciation of English authors and English poets did; even our pronunciation, absurd as it is, has a fixity and refinement which we may hope is not without a definite and not very remote relation to the music of Cicero and Virgil. The author is on surer ground in the letter to a friend who recommended him to learn this thing and that, where he inculcates by many charming analogies from cookery and other sources the important though neglected truth "that the mere addition of knowledge may be good for us or bad for us; and that whether it will be good or bad is usually a more obscure problem than the enthusiasm of educators will allow." This is all the more remarkable because the writer has no preference for specialists—indeed his natural predilections seem to lie rather in the other direction; his favourites are models of universal attainment like Humboldt and Goethe, or universal accomplishment like Julian Fane. The letters on women and marriage are full of delicate and beautiful observations: perhaps the best where all are good is a suggestion that married people should renew themselves for each other as an author renews himself for his public. The letter to a friend who seemed to take credit to himself, intellectually, from the nature of his religious belief is upon the whole the best of those on custom and tradition. The main position of it is that such self-complacency is misplaced whatever its ground, since the intellectual life is open to Sandemanians, Ultramontanes, and Atheists. This makes it more remarkable that other letters are pervaded by an assumption that for those who lead it the intellectual life is supreme. The assumption may seem to be self-evident; but in fact we see that the various activities of the man of business and of the muscular Christian, and even of the moral enthusiast, upon the whole confine themselves spontaneously within the elastic limits of general consent. Even the intellectual life itself has not been less intense at periods when it accepted these limits than it is now when it rejects them: Aristotle would have been as startled as Aquinas at the paradoxes of the modern advocates of truth at any price. G. A. SIMCOX.

LITERARY NOTES.

In the *Contemporary Review* (June 1) Mr. Herbert Spencer continues his papers on "The Study of Sociology:" the twelfth is devoted to "the theological bias" as a disturbing force in the development of a natural social morality. "Red Cotton Night-cap Country," by A. Orr, is an intelligent and sympathetic analysis of Mr. Browning's work: the reviewer's object is to interpret rather than to criticise, but the poet's frequent need of an interpreter is ingeniously accounted for; Mr. Browning aims at saying and thinking at length what most people are content dimly to see or feel, and as what is addressed to the intelligence can only be apprehended thereby, his audience is limited to those who are able to follow very original conceptions. In the same number Mr. Goldwin Smith answers "Mr. Greg on Culpable Luxury" with more urbanity and not less point than usual, pleading guilty to a *penchant* for the ethics of Christianity, and representing that moral responsibility may coexist with a scientific view of the laws of wealth.

The *Cornhill* has a lively and instructive paper on "The French (periodical) Press, from its foundation to the death of Mazarin." It would be curious to know whether Renaudot, the founder of the *Gazette de France*, who "not only inaugurated in France an Estate, Professional and Servants' Agency, as well as an office for private sales and exchanges, but further laid the basis of the Posté Restante, Parcels Delivery, Post-office Directory, Tourist's Guide and Money Order Office;

besides affording an outlet to troubled spirits like those who correspond through the agony column of the *Times*"—was at all indebted for the idea of these modern inventions to the father of Montaigne, who had divined the power of advertisement a century earlier. In the same number are some charmingly Heinesque lines on "New Rome," by Mr. Matthew Arnold.

The (American) *Catholic World* for May offers a new explanation of the epithet "young Abraham Cupid," used by Mercutio, and turned into "Adam" by most commentators except Mr. Dyce, who finding the same word in other passages plainly used as the name of a colour, wishes to read "auburn" wherever it occurs. The writer argues that "Abraham-men" in *Lear* is a term for impostors as well as a colour; that "Abraham's balm" is one name for the "kind of withy or willow commonly called *agnus castus* in England, the hemp tree." Wigs were made of flax and hemp, and to some extent from the similar coloured fibres of the "Abraham's balm" tree, and used by rogues for disguise, and by a somewhat forced ingenuity it is proposed to understand by "young Abraham Cupid" a tow-wigged or yellow headed young impostor.

The "Co-education" question, or rather the expediency of admitting women to Harvard College, is being discussed with some animation in Boston. Those opposed to the innovation state that at Oberlin and in most Western colleges it has been found that men and girls do not really follow the same course of study when they have the opportunity, from which it would seem to follow that Harvard might oblige the agitators without danger by simply insisting on strict conformity to the present college course from all students indiscriminately.

The *Journal des Débats* has recently published some letters of Mirabeau's which give curious confirmation to the little credited statements of Etienne Dumont in his "Souvenirs" to the effect that he himself and three of his countrymen (Genevèse), Reybaz, Clavière and Duroveray, had a large share in the composition of Mirabeau's most famous speeches. The letters are from Mirabeau to Reybaz, very confidential in tone, and actually apologizing for slight changes made in delivery or printing from Reybaz's manuscript.

The *Athenæum* (May 31) mentions dubiously the authorship of "An analysis of the influence of natural religion on the temporal happiness of mankind, by Philip Beauchamp." We believe that there is no doubt that the pamphlet, originally published in 1822, and reprinted for private circulation in 1866, was by the late Mr. Grote. Originality was scarcely to be looked for in so juvenile a production, but Godwin's views are put forward in it with much cleverness and ironical moderation. "Natural religion" is defined, of course quite arbitrarily, as a belief in an Omnipotent Being who will administer posthumous pains and pleasures to mankind. Belief in a future life does not by itself, the writer proceeds to argue, afford a directive rule of conduct. Attempts to infer such rule from the character of the Deity, of which nothing is known but that he is omnipotent and incomprehensible, lead, as the unknown is always terrible, to his being conceived as a capricious despot and addressed with servile praise. Pious works are not identical or coextensive with those prescribed by utility, or the motive for their performance would subsist independently of religion. Duty towards God is avowedly out of relation to the good of other men, and if it affects our happiness it must do so by diminishing it, since otherwise legislation on the subject would have been unnecessary. Threats of future punishment do not enlighten the judgment as to what is good, and human legislation can punish overt evil acts, while an hypocritical zeal for God's service ends in intolerance and other passions detrimental to the general interest. The utilitarianism, it will be seen, is decidedly crude, and the author did not succeed in weakening the claim of religion to respect on his own principles as giving a cheap sanction to positive police regulations.

The "Poésies inédites de Lamartine," just published, include some early attempts at tragedy, the plan of the great religious epic, of which *Jocelyn* and *La Chute d'un ange* were only intended to be episodes, and a fragment *Le Chevalier*, which is in the poet's best descriptive style.

Art and Archaeology.

Early Christian Numismatics, and other Antiquarian Tracts. C. W. King, M.A. London: Bell and Daldy. 1873.

MR. KING has been long in the field as an authority on ancient gem engraving. His popularity among lovers of this branch of art has been earned by several works of which we are free to confess that they display a very extensive knowledge of his subject. Of the two elements, however, required for thorough work in this direction of research, an intimate acquaintance with classical writers and a familiarity with modern discoveries and criticisms bearing upon ancient monuments of all kinds, it strikes us that Mr. King is decidedly superior in the former at the cost of the latter.

These remarks may not appear to be pertinent to a book labelled *Early Christian Numismatics*. But to our regret the book in question is not what its outside professes to be. For it contains, out of 302 pages in all, the following chapters which can neither be described as Christian nor numismatical: (1) "On an intaglio representing the clepsydra used at races in the Circus Maximus," p. 113-122; (2) "Signet of Q. Cornelius Lupus," p. 123-149; (3) "Seal set with an intaglio of the Laocoon," p. 151-171; (4) "The gem-portraits of Commodus and Marcia," p. 265-274; (5) "On an antique paste cameo, found at Stanwix, near Carlisle," p. 275-286. Of the other chapters some are Christian and some numismatical. The first (p. 1-93) alone combines both features, and probably for no other reason than its being first was chosen to supply the main title; the words "and other antiquarian tracts," which are added on the title-page, are not calculated to produce the impression that they apply to by far the greater part of the book.

A better opportunity could hardly be desired of airing an acquaintance with recent criticism in matters of ancient art, than in treating of the intaglio (p. 151-171), which appears to be an ancient copy of the well-known marble group of Laocoon. With regard to the marble group, a difference of opinion as to its date arose between Winckelmann and Lessing, the latter believing it to have been made in the time of Titus, and the former being convinced that it was the work of artists of the Rhodian school at a much earlier period. These opinions being based on a perfectly ambiguous passage of Pliny and for the rest on individual taste, it is not surprising that the supporters of the one never seem to succeed in shaking the faith of their opponents and that our principal authorities are still ranged with pretty equal strength under one or the other opinion. Winckelmann has been followed by O. Müller, Welcker, and latterly Brunn and Overbeck, while on Lessing's side have appeared Visconti, Thiersch, Braun, Stephani, and more recently Friederichs and Bötticher. If he had counted the supporters of the two theories from their published opinions on the subject, Mr. King could not, we think, have obtained a just foundation for his remark that "the majority of critics at present" refer the Laocoon group to a much earlier period than that of Titus, "perhaps to the school of Lysippus."

Mr. King may be right in his theory of this group having been originally intended to decorate the pediment of a temple of Apollo, though owing to some confusion in the process his argument appears to lead only to this that bronze could not well have been employed for such a purpose. "The group of the Laocoon would be with equal propriety chosen to fill the tympanum of a temple of Phoebus as that of Niobe and her children, teaching another moral, to decorate one consecrated to his goddess sister." As far as the moral lesson is concerned, certainly. But surely a repulsive subject like that of the Laocoon ought never to be compared on any other grounds with that of the Niobides. The sight of

physical pain may have been regarded with less horror than we suppose by the Greeks, but neither "the frequency with which the death of Opheltes by the bite of a snake is reproduced on gems," nor the statue, apparently of Philoctetes, by Pythagoras of Rhegium, *claudicantem ejus ulceris dolorem sentire etiam spectantes videntur*, nor even the poor representations of Prometheus which occasionally occur, are sufficient to convince us that a nation in whose legends the destruction of monsters by favourite heroes plays so important a part could have ever encouraged the execution of sculptures like the Laocoon group, which could only be fully appreciated by tastes fostered at gladiatorial displays. "Curves and spirals," it is true, "had a special charm for the Grecian eye," and it is not denied that the curves and spirals of the group in question are of a Greek character; for it is expressly stated to have been executed jointly by three artists of unmistakably Greek names. But it is contended on the other hand that these artists lived at a time when the true spirit of Greek art had departed, and that, therefore, the cruel subject in which their love of spirals and curves is displayed need not be reckoned among the subjects more or less familiar to the Greek masters of the earlier time when Greece was independent and its great artists all competitors for the applause only of the best of their countrymen.

The representation of the Laocoon which Mr. King now publishes occurs on the private seal of Thomas Colyns, Prior of Tywardreth from A.D. 1507 to 1539, and differs from the marble group as it now stands in the action of the right hand of the father, besides in some minor details. "He appears on the wax attempting with his right arm *bent* to tear away the head of the serpent from his throat into which it has already fastened its fangs, whilst at the same time he vainly averts his face from its attack. Now in the marble the action is totally different: Laocoon *extends* the same arm at full length and forces away from him merely a fold of the serpent's body, the head of which appears much lower down. . . . But the discrepancy is easily explained. This portion of the marble was wanting upon its discovery and was immediately restored—by M. Angelo as the story, of course, goes—consistently with his own false conception of the original attitude. Nevertheless a small projection is still visible on the head of Laocoon sufficient to have guided a more sagacious restorer to a better understanding of his duty, by suggesting the former adhesion of the serpent's bite in that particular place." This discrepancy assures Mr. King that the gem had been copied previous to the restoration of the marble, that is, previous to the Italian revival, and, as there was no time between the Italian revival and the date of the execution of the marble in which the gem could well have been copied, it is highly probable that both works are nearly contemporary.

ALEXANDER S. MURRAY.

THE FRENCH PLAYS.—MADEMOISELLE DESCLEE.

THE enterprise of Messrs. Valnay and Pitron, exercised in the face of many vexatious restraints, has enabled us all within the last month to see Mademoiselle Desclee in two or three great characters. No lady within living memory has sprung more suddenly into the front rank of actresses, and no one has relied more absolutely upon laborious art for the attainment of success with that public of the Gymnase Theatre which is fortunately as critical as it is large. In London, her first appearance was in the character of *Frou-Frou*, in the play of that name. Those who saw her in it from the beginning to the end, probably came away with the conviction that they had seen a great actress—an artist of sufficient sweep of intellect to conceive of a character as a whole from the written drama, and to work out that conception in detail, instead of trying to build up out of details an

effective and surprising *ensemble*. In seeing Mlle. Desclée on the stage you do distinctly each time see a new character; but the bias and temperament of the actress naturally determine the amount of success with which each character is presented, and I am not sure that so powerful an impression is produced by her *Frou-Frou* as by her much shorter performance in *Une Visite de Noces*—a piece which has not been acted at all in London. For the *Visite de Noces* calls for the display of qualities in which Mlle. Desclée is strongest; and calls exclusively for these. *Frou-Frou*, on the other hand, demands some gifts which are not in the possession of this accomplished actress—demands in the first act a romping girl's brightness and lightness, and in the last a quite peculiar gentleness of pathos. Thus, the last act would have been better played by Miss Kate Terry, and has actually been better played—or at all events more touchingly—in the opinion of fine judges, by Mlle. Léonide Leblanc. And the first act would gain quite as distinctly by the sparkling freshness and mischievous humour of a younger comédienne—Miss Nellie Bromley. But then between these two there are three acts which seem the especial property of Mlle. Desclée; and in these her exhibition now of restless impatience—gradually growing irritation—now of a calm and satisfied sense of mastery, now of scorn, now of passionate upbraiding, and now of vehement appeal, is of course absolutely unrivalled. What I may perhaps be permitted to speak of as the comparative failure of the final act is due, not wholly, but in part, to an over-use of that monotonous utterance of which Mlle. Desclée was the first to discover the value. Remarkable effects, especially in the expression of a scorn that is much restrained, may be produced by this monotonous utterance. Word falls after word with the persistency and equality of thunder-drops at the beginning of a storm. The face is Sphinx-like. No power is proved, but any amount is indicated. But this strange method fails of its effect in a death-scene, like that of *Frou-Frou*; which (laudably free as it is from all common faults of exaggeration and want of self-control) would be rendered infinitely more touching by one happily found change either of face or voice. It seems ungrateful to say this—and to be at pains to say it—when one easily remembers so very much that is admirable in the performance; but the truth is that Mlle. Desclée's artistic gifts and acquirements are so incontestable and so many that one is in some danger of forgetting that among them must not be reckoned the want of flexibility in gentleness,—of graduation in pathos.

A good deal might be said if this were the place in which to discuss the literary merit or moral teaching of *Les Idées de Mme. Aubray*, and of *Diane de Lys*—works of the early and of the middle period of the present Dumas's career; but of Mlle. Desclée's performance in these plays there is little to be said, apart from that which is said already, unless one begins to particularize with a criticism of detail, useless now that it is all over. But to see her in two or three parts—whatever parts these be—confirms the impression that Mlle. Desclée is one of the very few actresses with artistic instinct and cultivation to think out a character definitely before beginning to embody it, and then so to embody it that not the cleverness of this or that individual touch—the inspiration of this or that great moment—shall remain with you, but rather the life-likeness of the whole. But as one specimen of really great acting, it is fair to mention the extraordinary outburst of moral elevation and happy relief with which Diane welcomes what is unexpectedly good in the thought and expression of her associates; and as another one may call attention to the subtlety and suggestiveness of every look, gesture, and tone when Diane tells Paul Aubry that her husband has returned, and that his return is nothing whatever to her. There have been actresses with greater, or at all events more pleasing, means than Mlle. Desclée, but no actress with the like means has produced a greater result.

FREDERICK WEDMORE.

NOTES ON ART.

The *Gazette des Beaux-Arts* for June contains: 1. a long article on the *Salon* by M. Georges Lafenestre illustrated by several inferior woodcuts. The sculpture of the *Salon* receives more attention from M. Lafenestre than does that generally of our Royal Academy exhibition from the critics, and three out

of the five illustrations are devoted to it. 2. "Antique beds" considered especially as a form of sepulchre, by M. L. Henzey, is continued and finished. Among the illustrations is a curious Etruscan urn in the form of a festal bed on which the deceased is depicted taking part in his own funeral banquet. This curious custom prevailed it would seem with several nations. A jolly-looking king of Assyria is represented lying on his bed-tomb and partaking of refreshment with his wife who sits on a chair by his side. 3. "Léopold Robert d'après sa correspondance inédite." This is the fifth article on the subject by M. Charles Clément. 4. The Brussels exhibition is reviewed by M. René Menard. A good etching by Courty of "The Smoker" by Terburg, another by Hedouin of "La Jeune Fille à la Rose" by Goya, and a third by Greux of a White Horse by Wouverman are given as illustrations. 5. In "Paradoxes," second article by M. Edmond Bonaffe, "Le Comfort" is attacked as not being a French and therefore not a desirable thing. 6. "L'Oeuvre d'Eugène Delacroix" is an appreciative article by M. Louis Gonse. 7. "Bibliographie des ouvrages publiés en France et à l'étranger sur les Beaux-Arts et la Curiosité pendant le premier semestre de l'année 1873," by M. Paul Chéron, of the *Bibliothèque Nationale*.

The *Zeitschrift für bildende Kunst* is principally remarkable this month for its frontispiece—a masterly etching by W. Unger of one of Rembrandt's portraits (called that of "the Bürgermeister Six") in the Cassel Gallery. This was published some time ago in Unger's *Galerie zu Cassel*. It had then a somewhat warmer tone, but the reproduction is very good. An article entitled "Streifzüge im Elsass" by Dr. Alfred Woltman gives an interesting description of the street and church architecture of some of the old towns in Alsace. Several illustrations of rich Gothic buildings are given in it. A fourth article on the collection of Sir Richard Wallace in the Bethnal Green Museum by G. Gutenberg, criticising especially the works of Rubens and his school; a second article on the activity in building—*Bauhätigkeit*—now manifested in Vienna, and an article on Niccolò Alunno and the school of Foligno, complete the number.

A sale of a large and good collection of modern paintings chiefly of the English school, belonging to the late Mr. John Hargreaves, of Broad Oak, took place last week at Messrs. Christie, Manson, & Wood's rooms. Landseer's "Pensioners," Frith's "Pope making love to Lady Mary Wortley Montague," "Gathering the Offerings" by John Philip, "Christ in the Garden of Gethsemane" by the elder Linnell, and many other paintings by English artists of equal note were sold.

Great discontent has prevailed among French artists this year on account of the limitation of the space usually allotted to them in the Palais des Champs-Élysées. Living artists have been obliged to make room for dead ones, in pursuance of the Government scheme of the Musée des Copies. This has been manifestly hard on a large number of artists who have every right to exhibit in the Salon, and whose chance of selling their works depends perhaps on their so doing, but who on account of want of room have this year found themselves excluded.

Some reparation has, however, been offered to these offended artists by a spacious room having been allotted to them, capable of holding 800 pictures, situated behind the Palais des Champs-Élysées. The painters at once formed a commission to examine the pictures claiming admission, and the exhibition is by this time open.

The total sum realised by the sale by Messrs. Christie, Manson, and Woods of the drawings of David Cox that had remained in the possession of his son was £25,324.

In spite of the limitation of space, and consequently excluded artists, the catalogue of the Salon enumerates 2,142 exhibited works. This is 541 more than in our Academy. There are 1,556 exhibitors, divided into 1,064 painters, 309 sculptors, 41 architects, and 142 engravers and lithographers. Of these women artists amount to 168, and artists of various foreign nations to 163.

A reduced replica of the great picture of Sardanapalus by Delacroix, now exhibiting at the Society of French Artists in Bond-street, was bought by M. Prosper Crabbe at the Wilson sale for 70,000 francs.

According to the *Messenger du Midi*, a Montpellier paper quoted in the *Moniteur des Arts*, an important and interesting autograph of Molière has just been discovered among the archives of Montpellier. This is almost as great a literary event in France as the discovery of a Shakespeare autograph would be with us. The smallest line, or even a signature, by the great author of *Le Misanthrope* is extremely rare.

The directors of the Cologne Museum have brought out of their dépôt a picture which had hitherto been looked upon as valueless. It was in a bad state from neglect and dirt, and was considered as an all but worthless work by an unknown hand. The Pellenkofer process was however applied, and the picture, a Pietà, was then discovered to be an interesting work of Abraham Janssens (1567-1631).

At the sale of the pictures of the Marquis de la Rocheb... which took place a short time since in Paris a painting of Weymouth Bay by Constable was bought by an Englishman, Mr. J. Wilson, for 56,000 francs. The French Government, it is said, bid up to 50,000 francs for this picture, and it is now asserted that Mr. Wilson, "in a fit of generous remorse," intends presenting his acquisition to the Louvre. It is time certainly, as even Frenchmen are beginning to think, that the English school should be represented in the National Museum of France. Hitherto a small painting by Bonington, who may almost be reckoned as belonging to the French school, and two reputed Gainsboroughs, have been the only works by English artists in the Louvre.

If, however, as is said, Mr. Wilson will not only give the "Bay of Weymouth," but likewise a sketch of Salisbury Cathedral by the same artist, to the Louvre, that collection will be suddenly enriched by three Constables, for the Director, not knowing probably of Mr. Wilson's generous intention, purchased another work by Constable—"The Cottage"—at the same sale for 24,000 francs. Almost all the English pictures in the Rocheb... collection sold well. A portrait by Reynolds, however, of Sir George Yonge, which had been previously engraved in the *Gazette des Beaux-Arts*, only fetched the small sum of 6,000 francs.

The celebrated Hüsken collection of Albrecht Dürer's engravings and woodcuts has recently been acquired by the Vienna Academy of Fine Arts. This collection, which was originally formed by Herr Hüsken with a view to writing his *Catalogue Raisonné* of Dürer's engravings that was published in 1778, contains some very perfect impressions of the finest of Dürer's prints; especially a St. Jerome and a Little Cardinal are mentioned as extremely choice examples. There are as many as 160 wood engravings, and two or three of the scientific treatises, as well as the copper engravings. But besides these there is another treasure that goes with the Hüsken collection—a veritable lock of the great German artist's hair, whose history can be traced almost up to the time when it was cut off the head of the dead master. It originally belonged to one of Dürer's pupils, but has been transmitted through various hands until it finally came, with the Hüsken collection, into the possession of a painter of Frankfort, who has sold it with the rest to the Vienna Academy.

The June number of the *Portfolio* is enriched by a fine and large etching by M. W. Ridley of a London dock scene—"The Orange Wharf, London Bridge." In some respects this etching resembles those of similar scenes in Gustave Doré's "London," but it has none of the glamour that the French artist delights to throw over his representations of ordinary life. It is quite real. An etching called "The Ballad," by J. D. Watson, is a wonderful piece of work for a first attempt, as we are told it is, of the artist. Sidney Colvin continues his appreciative criticism of painters "From Rigaud to Reynolds."

A lithograph of Sir Joshua's "Cornelia" (Lady Cockburn and her children) illustrates his text.

Adolf Tidemand, of Düsseldorf, is exhibiting a large painting of a Norwegian wedding procession. The bridal party on their way home from church are obliged to cross a mountain stream. The bride and bridegroom, who are on horseback, are enabled to do this with tolerable dignity, but the rest of the merry party take off their shoes and stockings and prepare in various fashions to wade the stream. The landscape in which the scene is set is very effective.

Mr. Charles Critchett, formerly assistant secretary of the Society of Arts, is a candidate for the secretaryship of the Royal Academy, now vacant.

New Publications.

- BIRCH. Ancient Pottery. Murray.
 BULTEAU. Petite monographie de la cathédrale de Chartres, et des églises de la même ville. Cambrai : Corion.
 CUSANS. Inventory of Furniture and Ornaments remaining in all the parish churches of Hertfordshire in the last year of the reign of Edward VI. Parker.
 DE PULIGA. Madame de Sévigné, her Correspondents and Contemporaries. Tinsley.
 DOELL, J. Die Sammlung Cesnola. Leipzig : Bosz.
 DUFEU. Découverte de l'âge et de la véritable destination des quatre pyramides de Gizeh. Paris : Morel.
 FIORELLI. Gli Scavi di Pompei dal 1861 al 1872. Napoli : Detken e Rocholl.
 HOUGHTON, Lord. Monographs, Personal and Social. Murray.
 LAMARTINE. Correspondance, publiée par Mme. Valentine de Lamartine. Paris : Furne, Jouvet, & Cie.
 LONGMAN. The Three Cathedrals dedicated to St. Paul in London. Longmans.
 MARION. Rondeaux et vers d'amour par Jehan Marion, poète Nivernais du x^e Siècle. Paris : Willem.
 MORLEY. A first sketch of English Literature. Cassell, Petter, & Galpin.
 RALSTON. Russian Folk Tales. Smith, Elder, & Co.
 SAND, George. Impressions et Souvenirs. Paris : Lévy.
 SOLLY, W. Neal. Memoir of the Life of David Cox. Chapman and Hall.
 STRAUSS, D. F. The Old Faith and the New. Translated by Mathilde Blind. Asher.
 SYMONDS. Studies of Greek Poets. Smith, Elder, & Co.

Science.

Genera Plantarum ad Exempla imprints in herbariis Kewensibus servata definita; auctoribus G. Benth. et J. D. Hooker. Vol. II., pars I. London : L. Reeve and Co. ; Williams and Norgate. 1873.

THIS large instalment (pp. 534) of the second volume of the *Genera Plantarum* follows as promptly as could be expected upon the first, considering the great amount of work which both authors have upon their hands, the needless trouble and worry which one of them has had to endure in guarding the interests of the noble establishment under his charge, and considering also that the new part comprises—in fact mainly consists of—two such vast natural orders as the *Rubiaceae* and the *Compositae*. There remain no orders so large and, with one possible exception, none so difficult. We may now hope, and fairly expect, to see the work go on to completion at such a rate that it may actually represent the botany (or rather the Phanerogamous botany) of this generation, the end being reached before the earlier portions need recasting—a precious advantage, which in so large an enterprise and in these days of plentiful harvest and few labourers cannot often be secured.

It is safe to say that there are no other two living botanists who combine so many qualifications for such an

undertaking as this—who have (collectively speaking) seen so much living vegetation under diverse climes, have scrutinized so many dried specimens, and dealt with so many of the practical problems of systematic botany. Certainly no such couple can be found, capable of working together to a harmonious result, whose conclusions would carry so high a probability of being well founded.

Complete uniformity of treatment by two hands is not to be expected. It is likely that if the *Rubiaceae* and the *Compositae* had been elaborated by the same author the number of the genera of the former would not have increased from about 240 (in Endlicher) to nearly 340, and those of the latter diminished below the sum of the last previous enumeration. Yet this is by no means certain. Some orders furnish more decisive characters for genera than others, and are less disposed to isolate them in single species. The ratio of genera of single known species to those with more than one seems to vary between one to 2 (*Saxifragaceae*), or one to 2.4 (*Cruciferae*) to one to 3.2, which holds for *Leguminosae* and *Compositae*. Those of *Rubiaceae* are intermediate, viz., one to 2.8. So that monotypic genera play a conspicuous part in the system of nature; and the adoption of very comprehensive views respecting the limitation of genera only moderately lessens their very notable proportion. One may be confident that in the *Compositae* and the *Leguminosae* of the present work such genera are reduced to their lowest practicable numbers.

In a work like this, which must immediately pass into the hands of all systematic botanists, there is no need to explain its plan and characteristics, nor even to state how any particular order is treated. Yet a word or two respecting two such important orders as *Rubiaceae* and *Compositae* may not be amiss. The former are disposed in three (instead of the ordinary two) series, a small middle one being intercalated for the convenient disposition of the few genera with geminate ovules; these series are divided into twenty-five tribes, the characters of which are mainly taken from the aestivation of the corolla, and the nature, number, and when solitary the direction, of the ovules. These characters had been tentatively tried before (first by Mr. Bentham), and they appear to answer the purpose well. In *Compositae* the principal reforms of the order as left by the elder De Candolle who gave the later years of his life to its study, are first, the omission of that convenient primary division into *Tubuliflorae*, *Labiatiflorae*, and *Liguliflorae*, the latter at least differing from the other tribes of *Compositae* so much more widely than they do from each other that one regrets the change. Second, the tribes—thus ranking as the most comprehensive divisions—are increased from eight to thirteen (notwithstanding the inevitable union of De Candolle's two *Labiatiflorous* tribes into one), and the tribal characters are most clearly and skilfully worked out, much use being made of the anther as well as of the style. The exclusion of the *Pectideae* from the *Vernoniaceae*, and of the *Tussilageneae* from the *Eupatoriaceae*, was of course to be looked for; the constitution of a large tribe, *Inuloidae*, under which are brought together the *Tarchonantheae* and the *Gnaphalineae* of De Candolle, is one of the greatest improvements. So is the separation of the *Calendulaceae* from the *Cynareae*. Thirdly, the genera, which were almost nine hundred in De Candolle's time, and must have much exceeded a thousand, notwithstanding many consolidations, are here repressed with a strong hand, being reduced to less than 800, including a considerable number of new ones. This is done upon clear and intelligible principles, applied by a judgment uncommonly well balanced, but seemingly inclined now and then to excess in the way of consolidation.

At least we have the impression that it is here and there rather overdone.

Finally, instead of expatiating upon the merits of the work, which are sure to be recognized, one may more usefully and not ungraciously point out some small slips or faults. One or two relating to the structure of the fruit in certain *Caprifoliaceae* are partially corrected in the Errata (as respects *Symphoricarpos*, but not in the more obvious case of *Triosteum*). Both would have been avoided, and the structure of the ovule more definitely stated if some early observations by Dr. Hooker upon the latter in this order had been kept in mind.

In *Rubiaceae*, the phrase "Flores quoad organa sexualia di-v. tri-morphi," appended to the ordinal character, much too vaguely and insufficiently refers to the dimorphism in question to serve the whole purpose. If the differences in the length or insertion of stamens, and reciprocally in the length of the style, are not essential generic characters, they should be kept in view in the generic description, or else it may fail of its end. For instance, the character assigned to *Mitchella* is not true of any one individual in the genus. Whenever such individual has "stamina fauci corollae inserta; antherae exsertae," it has not "ramis styli exsertis," and so conversely. The same applies to *Houstonia*, *Anotis*, &c. It is not enough to say that the filaments may be short or rather long, included or exserted, unless it be stated that both occur in the same species, and that the style (of which no variation is mentioned) is reciprocally long or short. This state of things should also be kept in view in cases like that of *Heterophyllaea*, in which the exserted style and included anthers of the only known plant indicate the high probability of a counterpart to which the present generic character would not apply.

So also, but in a different way, the character of *Posoqueria* would be much improved by a statement that the anthers connive and are lightly united, that two of the filaments are strongly and two lightly curved, and all in such elastic tension that when a slight external force disturbs the nicely adjusted equilibrium of the anthers, and the force of the liberated filaments projects the pollen, the bowed filaments recurve while the straight one is inflexed and covers for a day or two the orifice of the corolla. These are no less matters of structure than important in the way of function.

As to *Pinckneya*, the brief erratum still leaves somewhat to be said, and its removal from the *Cinchoneae* may be challenged. The ovules it is true are horizontal or nearly so; and the seeds (which may well be termed "majuscula," since they are commonly five lines long, and the pod only six or eight) are fixed by the edge. So they are in two or three recognized *Cinchoneae* genera, while at least in one (*Bikkia*) they are said to be horizontal. As to the wing no *Cinchoneae* seeds have this better developed.

The genus *Relbunium* would be very convenient, no doubt, by leaving two characters to distinguish *Galium* from *Rubia*; but some Californian species completely invalidate it. So, also, the separation of *Valerianella* from *Fedia* is very well in Europe, but in North America are some intermediate species which fairly forbid the separation.

It is doubtless intended that this second volume shall contain the remainder of the Gamopetalous orders. We may hope that botanists will not have very long to wait for its completion.

ASA GRAY.

Notes on Scientific Work.

Anthropology.

Discoveries at Marsabotto.—The publication entitled *Materiaux pour l'histoire primitive et naturelle de l'homme*, 8 ann., 2 sér., 1872, p. 251,

gives some illustrations and a short account of a series of objects found in the ancient cemetery of Marzabotto, consisting principally of bronze mirrors, discs, fibulae, some of them of the Gaulic type and others resembling in form those found at Hallstatt, articles in gold, and bronze statuettes. Of the latter two types are to be distinguished, the first representing the human form with the meagreness and stiffness of a primitive art and yet with a considerable idea of sweetness in the expression of the face. The high pointed cap, *tutulus*, is sufficient proof that figures of this kind are the production of native Etruscan workmen. The second type, on the contrary, here represented by a group of Mars and Venus (fig. 21) and a statuette of a negro (fig. 22), is obviously the result of a close study of Greek models from the period just before the culmination of Greek sculpture. The shortness of the proportions and the roundness of the limbs both of Mars and the negro seem to suggest, from their resemblance in these respects to the sculptured metopes from the temple at Selinus in Sicily, that the Etruscans had caught the current of Greek influence brought by the Doric colonists to Sicily and the south of Italy. A group very similar to that of Mars and Venus is to be seen in the British Museum. Such figures were employed to surmount either candelabra or cistae, in the present case candelabra, as may be proved by the pedestals to which they are still attached. Among the other objects found were three fragments of pottery inscribed (1) *κακῶλυον ἐποίησεν*, (2) *Akios*, and (3) *Ἰνυριον*, not *Murni*, which can only be obtained by reading the letters in a direction not only contrary to what is usual, but also contrary to the direction of the letter R, which is the only one of them that cannot be read either way. The tombs in which these objects were all found are of two kinds, the first being formed of four slabs or blocks of stone with a heavy cover either pointed and ribbed like a roof of a house, or flat and surmounted by a sort of pillar, while the second are in the shape of wells (fig. 28, 29) constructed of small pointed flints without cement, and varying in depth from 2 to 10 metres. The diameter of the mouth varies from 0.3 to 0.8 of a metre. The contents consist of three or more skeletons, a large urn, vases of clay and bronze rings, pieces of tiles and sometimes of painted vases, and bones of domesticated animals. Excepting two others found at Certosa tombs of this kind have not hitherto been discovered in Italy. In France, on the other hand, they frequently occur. A third class of tombs at Marzabotto are formed of chests made of large tiles with a cover and capable of holding skeletons entire.

Costanti, the tattooed Sultane.—It is much to be regretted that Costanti, after yielding so far as to go to Berlin for the purpose of being more closely examined by Virchow and Bastian, should have been overtaken at the last moment by an illness which he made the pretext of returning at once to Vienna. There is little doubt but that the real cause of his sudden departure was the dread of being subjected to a fresh examination as to the circumstances under which he was tattooed, a subject of which his previous accounts are in a high degree conflicting and unsatisfactory. Fortunately we have photographs of him as well as a detailed description in the *Wiener Medicinischen Wochenschrift*, 1872, No. 2, and an engraving on a large scale in Hebra's *Atlas der Hautkrankheiten*. From these it appears that the tattooing covers the entire body with the exception of the nose and such parts as the soles of the feet. The colours are mainly dark blue with an occasional touch of red, while the design, embracing figures of animals, flowers, weapons, and other objects with written characters in some places, particularly in the palm of the hand, is carefully carried out. The skin, instead of suffering in the process, is quite soft and delicate to the touch. Its feeling is unchanged, and in point of sensitiveness to temperature if anything increased. According to his account the instrument employed was a metal cylinder, pointed and split at the point like a pen, with a heavy metal handle. This cylinder being charged with coloured liquid was then placed against the skin, and resting on the left forefinger of the operator the point was driven with a steady movement under the skin. With three hours of this daily the whole work was completed in three months, and that it should have occupied so long a period is not to be wondered at when we consider the elaborate and truly artistic character of the design. All doubts as to the tattooing having been done in Burmah are now at an end through the assurance of Bastian that the letters which occur in it are Burmese. Costanti had called them Arabic. Though it is possible that he may have been subjected to the process as a proper punishment for a mercenary soldier captured in war, it is more likely that he had himself so carefully tattooed only for the ulterior object of gain. See *Zeitschrift für Ethnologie*, 1872, pt. vi. p. 201.

Clay Vase from Alba Longa.—Virchow having had brought to his notice one of those prehistoric vases of black clay which were found in 1817 under a layer of peperino at Alba Longa, now Marino, and of which the British Museum possesses several specimens, describes it in the *Zeitschrift für Ethnologie*, 1872, pt. vi. p. 221, as having been neither formed by the aid of a potter's wheel nor baked in a kiln. It is altogether without ornament, and in colour and appearance closely resembles the old Etruscan vases.

The Amber of Bologna.—Prof. Capellini has examined the ornaments of amber found in the ancient cemetery of Certosa, and is con-

vinced that the amber employed in these cases is precisely of the same nature as that still found in the neighbourhood of Bologna. He is therefore surprised that if, as he supposes, the amber of this district was used to a considerable extent in ancient times in the manufacture of personal ornaments and such like no mention should be made of it by writers like Strabo and Theophrastus who took pains to collect facts of this kind. The same, however, applies to the amber still found in the plain of Catania in Sicily, and yet there is no doubt of the latter having been extensively used by early artists in Italy. The Sicilian amber and that of the north of Italy are very like each other.

Geography.

Central Australia.—Intelligence has reached England of a new journey to Central Australia which is perhaps the most important, as regards geographical results, of any that has been undertaken since Macdonnell Stuart's march across the continent in 1861-62, and which quite subverts preconceived notions respecting the possibility of rendering that region permanently habitable.

The exploring party was despatched from Victoria by the exertions of Baron von Mueller. Mr. Ernest Giles, in company with Mr. Carmichael and an attendant, started from Chambers pillar, an almost central point of Australia on the line of the great overland telegraph, and explored the very heart of the continent for upwards of three hundred miles to the westward in various directions. The general features of the country were found to be the same as those observed by Stuart further to the east in the same latitude, scrub and sand-hills, alternating with grassy flats, mulga and oak trees often in abundance, ranges of hills with here and there creeks of fresh water. The animals of the district are wild ducks, pigeons, emus, and kangaroos. Occasional tribes of natives were likewise met with. Two important discoveries were made, first, the existence of a considerable mountain range of about 2,000 feet in relative elevation, or perhaps 4,000 feet above the sea level, extending westward in the line of the Mac Donnell Range discovered by Stuart; and secondly, of a great salt lake which forms a complete obstacle to further progress. The lake, as sketched in Mr. Giles' map terminating indefinitely to the westward, has a length of about 150 miles with an average width of ten miles, and must require a very considerable rainfall for its supply. In describing a flock of pelicans which he noticed, Mr. Giles remarks: "They came from the N.W., and indeed all the aquatic birds that I have seen on the wing come and go in that direction. Though there are plenty of small fish in the Finke, a creek followed on the journey, I do not think that they are large enough for mobs of pelicans to exist upon, for the largest I have seen was no bigger than a sardine; I should imagine that these birds had come from some larger waters in the tropics." The lake is named "Amadeus;" its waters are briny salt, and no fresh water whatever was to be found near its shores. Several specimens of old metamorphic rocks which probably indicate the presence of auriferous beds have been brought back; their existence in Central Australia was hitherto unknown.

Mr. Giles is about to start on a new journey to the south of Lake Amadeus, in the hope of penetrating still further into the unknown western interior.

Chemistry.

Pinacolin Alcohol.—A new tertiary alcohol bearing this name has been prepared by Friedel and Silva (*Bull. Soc. Chim.*, 19, 193) by the action of sodium on pinacolin and distillation of the washed product. The greater portion passes over at 120°.5 and consists of a clear liquid possessing the smell of camphor. This is the new alcohol which is isomeric with hexylic alcohol; from the manner of its formation it is a dimethyl-isopropyl-carbinol. When cooled in ice it solidifies in crystals resembling those of carbolic acid. The iodide, $C_8H_{13}I$, is not very stable and when distilled with water breaks up into hexylene, boiling at 70°, and hydriodic acid. In its behaviour at low temperatures as well as in the characters of the iodide the new alcohol resembles trimethylcarbinol. The chloride, which boils at 112°.5—114°.5, is isomeric with the body obtained by Schorlemmer by the action of chlorine on diisopropyl, which however has a boiling point of 120°. Though in many features pinacolin alcohol resembles Wurtz's amylene hydrate it bears a temperature of 250° without undergoing decomposition. By treatment with potassium bichromate and sulphuric acid it is converted into pinacolin which boils at 106°. This is an important observation, for the belief has hitherto been held that a tertiary alcohol cannot yield on oxidation a product containing the same number of carbon atoms. By the oxidation of pinacolin the authors have obtained an acid which melts at 26°, possesses to a slight degree the odour of butyric acid, and has the composition of valerician acid but which widely differs from that substance in boiling point and other properties. After the distillation mentioned above by which the alcohol was isolated the retort contained a small amount of a compound that crystallised on cooling and proved to be

a pinacone of pinacolin, $2 C_6 H_{11} O + 2 H = C_{12} H_{22} O_2$.—Berthelot proposes to arrange acids in three classes: 1. acids of simple function like acetic acid; 2. acids of complex function like lactic acid or salicylic acid; and 3. incomplete acids, to which the phenols as well as the alcohols belong. The acid of Friedel and Silva comes probably in the last category. These acids exhibit differences in the amount of heat which they develop during combination with an alkali. Acetic acid, when treated with soda, gives off 13300°, no matter how much the alkali is in excess. Lactic or salicylic acid with one equivalent of alkali evolves the same quantity of heat as acetic acid, but by the addition of a second equivalent of alkali a further, far smaller amount of heat is set free, it being in the case of salicylic acid about 3000°. By great dilution of the alkaline solution, however, the second evolution of heat is not observed. Phenol gives off about 7400° and alcohol causes no development of heat when the alkaline solution is very dilute.

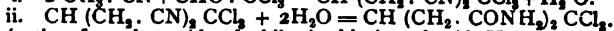
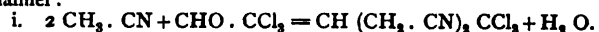
Artificial Formation of Fluor Spar.—Scheerer and Drachsel have recently succeeded (*Jour. Prakt. Chem.*, 1873, No. 2, 63) in forming crystals of calcium fluoride. Some attempts to obtain them by fusing the fluoride with mixtures of the chlorides of calcium, potassium, and sodium were not attended with any great success; occasional octahedra were found, but cubes or combinations of cubes and octahedra on no occasion. By heating calcium silicofluoride in an aqueous solution of calcium chloride to 250° for 10 hours a great quantity of octahedra were produced, an edge on one of which measured 0.08 mm. An aqueous solution of calcium fluoride yielded no crystals on evaporation at ordinary temperatures; when however the fluoride is heated with water slightly acidulated with hydrochloric acid for several hours at 240° under a pressure of 32 atmospheres of steam well developed octahedra are formed in abundance. Barium fluoride crystallised from its aqueous solution in cubes 0.02 in length. This fluoride when digested with hydrochloric acid in the manner above described furnished prismatic crystals of a compound of barium fluoride and chloride; when nitric acid was used cubes accompanied by prisms were produced. The experiments of these observers go to show that a slow action, in conjunction with a low temperature, favours the formation of fluor spar in cubes, while rapid action at a high temperature causes the fluoride to crystallise in octahedra. Barium sulphate deposited from a solution of the chloride heated with an excess of sulphuric acid to the same high temperature formed crystals considerably larger than those obtained by precipitation in the ordinary manner. By the action of calcium sulphate on barium fluoride at a high temperature well defined crystals containing both acids and bases separate, and it was only by a long sustained heating that individual crystals of fluor spar and barium sulphate were recognised. The authors are of opinion that the "Baryto-fluate of Lime" of Smithson may after all prove to be a mineral species and not a mere mixture as many mineralogists assert.

The Evolution of Oxygen by Plants.—In a paper communicated to the Academy of Sciences of Vienna Prof. Boehm (*Ber. Deut. Chem. Gesell. Berlin*, 1873, 1008, 550) shows that the carbonic acid absorbed by plants is not, as has hitherto been supposed, taken up directly by the cells containing chlorophyll, but that the organs must first become covered with an atmosphere of carbonic acid in order to perform their respective function. Prof. Boehm has been led to this conclusion by the following facts: 1. Leaves of *Fragrans* dipped in water containing carbonic acid and exposed to sunlight give off but very little gas if the little bubbles of gas forming on them are removed immediately they make their appearance. 2. The evolution of gas ceases if the coefficient of absorption of water for carbonic acid be augmented either by a reduction of temperature or by pressure, although under these conditions gaseous carbonic acid is still decomposed. 3. The evolution of gas likewise ceases if the leaves before the experiment are injected with water and the conditions necessary for the formation of bubbles on their surface greatly limited. Injected leaves of land plants, on the other hand, continue to develop in an atmosphere containing carbonic acid a considerable amount of oxygen.

In some experiments on the decomposition of carbonic acid by green leaves of land plants in a mixture of carbonic acid and hydrogen he observed that the quantity of oxygen produced was always greater than the volume of carbonic acid taken up; in some cases the excess in volume equalled that of the leaf itself. To trace the origin of this excess of gas the air enclosed in the tissues of living plants called for examination. Contrary to expectation the amount of gas extracted from leaves and twigs proved to be enormous and consisted almost entirely of carbonic acid. Living tissues of land plants, in fact, when placed in an atmosphere free of oxygen commence at once to give off carbonic acid, which they continue to do as long as they are living, and in the case of green leaves at a temperature of 20° C this is about 48 hours. *Cateris paribus* the amount of gas disengaged varies greatly with the temperature. This phenomenon is in every way analogous to that observed in the yeast of beer especially as regards what is termed its spontaneous fermentation. Organisms shut off from free oxygen derive the force necessary for carrying on the vital processes from internal combustion (the "innere Verbrennung" of Adolf Meyer). If green leaves of land plants be placed in hydrogen the volume of the gas is but slightly in-

creased and on analysis it is found to contain some oxygen. Mere traces of that gas will enable plants containing chlorophyll to carry on their normal respiration in sunlight. Green leaves which have been placed in the dark for three or four hours at a temperature of 20° C in an atmosphere of hydrogen and then exposed will often evolve one or two cub. cent. of oxygen. If the time be prolonged to twelve or fifteen hours they produce carbonic acid only on exposure; they have lost the power of taking the oxygen required for their normal respiration out of carbonic acid. Atmospheric air in which leaves of *Fragrans* were exposed to sunlight underwent no change in volume or composition at 30°; when however the temperature was raised to 40° or lowered to 10° more carbonic acid was produced than was decomposed by the process of respiration.

Chloral and Acetonitrile.—Hübner and Schreiber some time since in a paper on the atonic weight of fumaric and maleic acid communicated the results of some preliminary experiments on the action of acetonitrile on chloral, and gave an incorrect formula to the crystalline substance, the product of the reaction. They have now ascertained that this body, which resembles the one obtained by Baeyer by the action of chloral on benzol and sulphuric acid, is produced in the following manner:



It is, therefore, the amide of a bibasic chlorinated acid. Hübner (*Chem. Centralblatt*, 1873, No. 13, 201) believes that the compound formed by Meyer and Dulk from acetic anhydride and chloral is an isodipic acid, the acid in fact related to this amide.

The Basicity and Constitution of Periodic Acid.—Thomsen has determined the basicity of this acid by the method which he employed in the case of other acids, by neutralization (*Ber. Deut. Chem. Gesell. Berlin*, 1873, No. 6, 2). A maximum evolution of heat was observed when two molecules of potash act on one of acid. The chief results given in his paper are as follow:—The molecule of periodic acid is represented by the formula $H_4 I_2 O_9 \cdot 3 H_2 O$; it is tetrabasic and decatonic. The normal salts have the form $R'_4 I_2 O_9 \cdot 3 H_2 O$ or $R''_2 I_2 O_9 \cdot 3 H_2 O$. The three molecules of water are not in close combination and may be removed wholly or in part by the application of heat. The heat of neutralization in the case of the normal potassium salt is $4 \times 13300^\circ$. There are three classes of basic salts and the following formulæ represent one normal salt of each series: $Pb_2 I_2 O_{10} \cdot 2 H_2 O$; $Zn_2 I_2 O_{11} \cdot H_2 O$; and $Ba_2 I_2 O_{10}$. Basic potassium and sodium salts do not apparently exist in the solid state or are readily decomposed by water. When acids act on the normal salts an acid salt of the formula $R_2 I_2 O_9$ is obtained. This decomposition of the molecule is attended by a considerable absorption of heat, about 16000°, so that the two molecules of potash required for the formation of the acid salt develop only 10300° while the normal amount of heat is about 26000°.

Basarow, who has published a paper on the subject in the same part of the *Berichte*, does not agree with Thomsen in doubling the formula $H_5 I O_6$ and considers periodic acid to be a combination of iodine with one atom of oxygen and five hydroxyl which would give it the structural formula $(HO)_5 I O$. Of the five groups of hydroxyl two only play the part of acid hydroxyl, the remaining three of alcohol hydroxyl; and the acid therefore is pentatonic and dibasic. The following formula expresses according to Basarow's view the different functions of the hydroxyl groups: $(HO)_2 I O (OH)_3$.

Metallic Phosphides.—The compounds of phosphorus with zinc and cadmium have been studied by E. Renault (*Compt. rend.* 76, 283). By passing phosphorus vapour over zinc or the oxide of the metal at a red heat there is formed in addition to the compound already known, $Zn_3 P_2$, fine yellow, brown or red needles which by further heating become of a bright red colour and have the composition $Zn P_3$. It is but slightly attacked by acids. Cadmium under the same conditions forms two phosphides, one with a metallic lustre giving the formula $Cd_3 P_2$, the other consisting of carmine and often indigo-coloured crystalline plates of the compound $Cd_3 P$. Both substances are easily decomposed by acids and give off phosphuretted hydrogen, the latter body likewise forming hypophosphorous acid as well as a yellow product which contains phosphorus.

Tridymite in Quartz.—In the *Mitt. aus dem min. Museum der Univ. Prag* Dr. K. Vrbna announces the discovery of crystals of the new form of silica in a specimen of quartz the locality of which is unknown. They occur in characteristic groups of little six-sided tables on which he recognised in addition to the pinacoid and the prism planes a pyramidal face forming a truncation of them both.

The Salt Beds of Stassfurt.—C. Bischoff in the *Zeitschrift für ges. Naturwissenschaften, Halle*, Band 40, describes some recent borings made between Stassfurt and Schöneberg, which have been driven to a depth of 1,000 feet. During the operations a bed 54 feet in thickness and consisting for the most part of sylvine was struck.

Writing from Pau (*Chem. Centralblatt*, 1873, No. 13, 204) F. A. Hartens sends a further contribution to the chemical history of plants. He has noticed how materially the seasons affect the amount of certain

complex chemical compounds which they secrete. In autumn he sought in vain for chrysophyll in *Ulmus* and *Mercurialis perennis* though they yielded a considerable amount during the spring. Chlorophyll also exhibits a change and readily undergoes decomposition in autumn, and this too before the leaves have begun to lose colour. *Isopyrum thalictroides* when in blossom contains two alkaloids, one amorphous, the other crystalline. In autumn when the leaves have faded the root no longer produces a trace of the crystalline body while the amorphous alkaloid is in excess. He remarks that the fact of the yield of an alkaloid undergoing a qualitative as well as a quantitative change during the development of a plant is of great technical importance, especially in the case of plants which produce several alkaloids. It would be an interesting question to ascertain at which period of the year *Papaver Somniferum* contains most morphia and when most narceia and codeia.

Dr. Geinitz, the director of the Royal Mineralogical Museum in Dresden, has just published a small pamphlet describing the collection under his care and tracing its history from the time of Georg Agricola, when a *Museum für Kunst und Natur* was first founded in 1553, down to the present day. The present classification of the minerals was adopted in 1857 when the museum was committed to the charge of Prof. Geinitz. The specimens are arranged in two collections: one a general collection, the other "eine vaterländische Mineralien-Sammlung." In the former the non-metallic minerals are classified according to the acid, the metallic minerals according to the metal they contain, the whole being included in five great groups: geoliths, metals, metaloids, anthracoids, and haloliths. A short definition is given of the characters of each family and a slight history of the more remarkable specimens. The list of mineralogical and geological papers issued by the museum since 1836 is a long one.

The second volume of the *Centième Anniversaire de Fondation* (1772-1872) of the Royal Academy of Belgium, which has recently been issued, contains a very valuable "Rapport Séculaire" by M. de Koninck on the chemical researches which have appeared in the publications of the Academy during the century.

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- DEBAT, L. Essai sur la constitution de la matière et l'essence des forces dans l'ordre physique. Baillière.
- DE LA ROSA, G. Biblioteca Peruana. O las Fuentes de la Etnografía, Historia, Geografía, y Literatura del Peru. 1ª Serie.—Etnografía. Trübner.
- DELFORTIE, M. E. et FISCHER, P. Note sur quelques ossements de cétacés, de Léognan (Gironde). Bordeaux: Coderc et Degréaux.
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- FOSTER, J. W. Prehistoric Races of the United States of America. Trübner.
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- JOURDAN, P. Flore de Vichy. Avec un préface de George Sand. Baillière.
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- LINCER, M. Des granules magnétiques qu'on observe dans quelques dépôts du bassin de la Gironde. Bordeaux: Coderc et Degréaux.
- LISTING, J. B. Ueber unsere jetzige Kenntniss der Gestalt und Grösse der Erde. Göttingen: Dieterich.
- LOWNE, B. W. The Philosophy of Evolution. Van Voorst.
- MÜLLER, F. Allgemeine Ethnographie. Wien: Hölder.
- PIKE, N. Sub-tropical Rambles in the Land of the Aphanapteryx. Sampson Low.
- ROBERT, E. Silex taillés en Islande. Paris: Walder.
- SCHMIDT, F. Ueber die Petrefacten der Kreideformation von der Insel Sachalin. St. Petersburg.

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History.

Debates in the House of Commons in 1625. Edited by S. R. Gardiner (Camden Society).

WHEN Charles I.'s first Parliament was summoned the King and the House of Commons appeared to be on the best of terms. When it was dissolved the great quarrel between them had fairly commenced. All historians have tried to investigate the reasons for this change, but hitherto we have not had the materials necessary to the inquiry. There is a large *lacuna* in the Journals, and the reports given are poor and scanty. Mr. Forster's Life of Sir John Eliot first made us acquainted with the debates, and now Mr. Gardiner prints a tolerably full summary of them from a MS. in the library of Sir Rainald Knightley at Fawsley. He has added an independent and even fuller report of the Oxford session from the Harleian MS. 5007, and some news letters; while the State Paper Office supplies a defence of the government, and a report from Pym on Montague's case. The key to the whole question is to be found in the parliamentary history of the previous year. The Commons, having regard to the limited resources of the nation, wished to limit the proposed war to an attack on Spain and Spanish commerce by sea, while giving some aid to the Dutch, and placing England and Ireland in a state of defence. In short, they were guided by what had been the policy of Elizabeth. But James I. and his son and Buckingham wished to form a great continental alliance to recover the Palatinate, and to throw the main weight of the war upon Germany. At last a compromise was made: the Commons' plan was adopted for the present, while the King was to mature his plan and lay it before Parliament in the autumn. Under Buckingham's guidance this engagement was broken; Parliament was not summoned in the autumn, the marriage of Charles with Henrietta Maria was arranged upon terms to which Charles had assured the Commons he would never submit, and arrangements were made for subsidising Mansfeld and the King of Denmark, and plans entertained for sending ships to attack Genoa and an army to besiege Dunkirk. This policy was far wilder than that which the Commons had rejected, as being beyond the means of the kingdom. When the fact of this fundamental difference between the King and the House antecedently to the opening of the session is once clear, all that followed is clear also. It was only bit by bit that all Charles' plans and subsidisings became known, he having most unaccountably made no

general statement at all to the Parliament. There was no need for him to have gone to war when he found that the Commons would not vote the enormous sums required to carry out his plan, for war was not yet declared, and the Commons were for some time in doubt whether the war was meant by the King to be against Spain or against the Emperor. This fact is kept out of sight by Hume, who says, "when the war which they themselves had so earnestly solicited was at last commenced, the immediate desertion of their sovereign could not but seem very unaccountable." But the war was not yet declared, and it was not the war the Commons had wished when inflamed by Charles' and Buckingham's false narrative of what had taken place in Spain (Hume gently says "this narrative deserves great blame"), but a very different war, and one against a different sovereign. Mr. Gardiner has well brought out the essential opposition of view between the King and the Parliament. We trust that having now accumulated materials enough in his late publications he will give us the continuation of his History of James I., which he has impliedly promised us for some time. We note one small erratum. Should not *soe*, p. 182, line 8, be *noe*? C. W. BOASE.

Storm's Critical Examination into the Historical Writings of Snorre Sturlasson. [S. Sturlassons *Historieskrivning*. En kritisk Undersøgelse af Gustav Storm.] Copenhagen: 1873.

In the spring of 1870 the Danish Royal Society (*det kongelige Danske Videnskabselskab*) propounded, as the subject of a prize essay, four critical questions concerning the character and origin of the great sagas attributed to Snorre, with a view to bringing out all attainable evidence with regard to the authorship of the *Heimskringla* and its value as an historical storehouse. Early in 1872 it was decided that the gold medal of the society should be awarded to Mr. Storm for the exhaustive and most learned treatise that now lies before us, and it is impossible to suppose that it could have been more thoroughly deserved. His investigations have been laborious and unflinching, and he presents us here with a digest of the whole, given in a style rarefied to the extreme of conciseness and terse almost to baldness. The work is not at all adapted to attract even the cultivated public, but to lay before scholars a clear and statistical view of what has been effected in the criticism of early Scandinavian history.

The first section of the treatise is occupied with the evidences that exist to show that Snorre wrote the *Heimskringla* in its present condition, and the author upholds his conviction of the inherent unity of that work in opposition to the contrary arguments of Professor Maurer. The second section is more elaborate and laboured. It consists of a patient consideration of the works of all the predecessors and followers of Snorre, and of the sources from whence he drew his information. The result of these exceedingly difficult investigations seems to be the certainty that already in Snorre's youth, and perhaps before, sagas had sprung up in the West, North, and East of Iceland; that Snorre knew at all events some of these, and that so they could influence his style; that many excellent writers were contemporaneous with Snorre, and that even after his time saga-writing was carried on in an historical spirit in the West and North; that in the next generation after Snorre there arose in the South Province a great writer, the author of the *Njálssaga*, who knew the previous literature from the other provinces; but that, lastly, soon after, in the close of the century, saga-writing began to be driven out by the influence of foreign romance, which brought historical sobriety into discredit, and introduced a legendary element into historical composition. The criticism of the various early historians is extremely full of interest.

The general reader is pleased to come, in the next division, to the personality of Snorre himself. A wonderful charm rests around the story of the first great modern author, with his wandering life, romantic fame, and tragical ending. Mr. Storm collects all the particulars of Snorre's early life and studies. Born in 1178, he came to Odde when he was only three years old to be brought up by the learned Jon Löftsson, who died while he was still a youth. It is more than probable that his education in Jon Löftsson's house was conducive to the development of poetical genius, the seeds of which seem to have existed in several members of the Sturlunge family. In 1212 he wrote a poem on Hákon Jarl, and when he was in Norway in 1218 he pronounced a series of verses before Skule Jarl, the burden of which, still preserved, proves him to have been even then a master-skald. Snorre's visit to Norway immensely quickened his literary powers; four years after, in 1222, he had finished his *Edda*. He was received in Norway as no Icclander had been before him, and this voyage turned his thoughts to the subject of his greatest work, the history of the Norse kings. In 1219 Snorre visited Sweden; sailing round the whole coast of Norway from Nidaros (Trondhjem) to Oslo (Christiania) he penetrated as far as Götaland. This Swedish journey doubtless influenced the writing of the *Ynglingasaga*, which was finished about 1219. Mr. Storm follows the life of Snorre no further than this point. He then dwells with much acumen on the peculiar excellencies of his author's historical manner, and points out that the great advance that Snorre made over his predecessors, the authors of *Morkinskinna* and *Fagrskinna*, consisted in this, that he gave not a series of biographies, but a continuous outline of the whole history of the Norwegian dynasties.

The remainder of the volume is occupied with more purely technical matters, such as the collation of MSS. No trouble has been spared to make the work exhaustive in itself and serviceable for students. The arrangement of the divisions and subdivisions of the criticism cannot be too highly praised, and there is a handy index. EDMUND W. GOSSE.

Konunga Sögur. Eller Sagaer om Sverri og hans efterfølgere udgivne af C. R. Unger, Christiania, 1870, 1871 (two fasciculi, to be continued).

THE lives of King Sverri and his grandson, King Hakon, are preserved in various MSS., some containing those sagas in full, some in a more or less abridged form. In this collection it is intended to print the chief vellums containing the best texts of the lives of these two kings. The beginning has now been made by publishing the abridgment contained in the Icelandic vellum, Eirspennil, or *Brasen-Clasp*,—thus called by Torfæus from its binding,—a vellum of the end of the thirteenth century, and now in the Arne-Magn. Collection, under No. 47 fol.; the first part of this MS. contains the lives of King Harold Hardradi and his successor, in a recension of the same family as the Kringla. The Eirspennil, or a transcript thereof, has thus also furnished the text to the third volume of the folio edition of *Heimskringla* of 1777 (see a former article); but here we are only concerned with the Sverri's saga and those of his successors.

King Sverri was a "new man." He was born in Norway, but came, five years old, to the Faroes, where he was brought up. The kingdom of Norway he won, sword in hand, with his Birk-banes. A warrior-king like Sverri had not been seen since the days of Harold the Fairhair. But besides all his battles and troubles he was well versed in tales and song and history. The Icelanders had a great liking for him, and refer to his judgment in historical matters; e.g., how Sverri used to speak highly of Olave Tryggvason's valour

at Swolder; how Sverri had been entertained by such and such story, and that he had said that this and this tale was not true, but that it was amusing. In Sverri's speeches and addresses to his soldiers we find almost the only allusions in ancient writers to ancient Eddaic songs, to popular legends (nursery tales such as in Grimm's Fairy Tales), and to popular lays. Hated by a large part of his own people as a usurper, and excommunicated by the Pope as an enemy of the Church, although in his youth he had himself received priestly ordination—he bethought himself of finding an historian of his own choice to write down his life. This man he sought and found not among Norsemen, but among Icelanders, in the abbot Karl, of Thingeyrar (died 1211); a sympathizing historian, a man after the king's own heart, for of this the saga bears witness everywhere. With this man the king sat closeted, told him his life, his dreams, and early deeds, dictated to him how to write and what to write. This appears to have been about the year 1186, and up to that date it is thought the saga was written down under the king's eyes, and partly from his own dictation. The latter part of the saga, up to the king's death in 1202, is somewhat briefer, but in word and in spirit it is kith and kin with the former, although here the historian had to write from other sources, unless, indeed, the king all along up to the end of his life communicated with his man in Iceland. The Sverri's Saga is remarkable among the old Icelandic Sagas, and unique from a philological point of view, being stocked with singular and, to an Icelander, unusual words and phrases, evidently due to the king's own inspiration and dictation; but as the transcribers were usually no respecters of such things, and often left out, or substituted common words for choice old words which were less intelligible to them, so it happens that no single perfectly good or authentic text is preserved in any "single" MS. The text of the Eirspennil, although merely an abridgment, is remarkably rich in those phrases; the compiler having evidently had lying before him a very excellent copy of the saga: various sentences and phrases are preserved only here, e.g., *Kasta klininginum ok könnunni*, answering to the English, "to throw the helve after the hatchet;" this and many other things, in the Oxford Dict. marked as Fms. viij., v.l., are due to the text of Eirspennil.

After that saga follows a brief abridgment of the Lives of the kings between 1202-1216, which are also partly lost. We notice here only the curious story of the *Blacksmith and Odin*, p. 237. The last part of the Eirspennil is made up of an abridgment of Hakon's Saga, written by Sturla, the famous writer of the Sturlunga Saga and other historical works (born 1214, died 1284), but as the edition of that saga is not as yet finished, we reserve that to a future notice.

G. VIGFUSSON.

New Publications.

- BIAIS. Annales de la Rochefoucauld, xvi^e et xvii^e siècles. Angoulême: Nadaud et Cie.
 BROSSET, M. Des historiens arméniens des 17 et 18 siècles. Arakel de Tauriz, registre chronologique. Leipzig: Bosz.
 CICERO, M. T. Brutus, sive de claris oratoribus, recensuit L. Quicherat. Paris: Hachette.
 FEUILLET DE CONCHES. Louis XVI., Marie-Antoinette, et Madame Elisabeth. Paris: Plon.
 GAIRDNER. Debates in the House of Commons in 1625. Camden Society.
 GAMS, P. B. Series episcoporum ecclesiae Catholicae, quotquot innotuerunt a beato Petro apostolo. Regensburg: Manz.
 GEIGER, L. Quid de Judaeorum moribus atque institutis scriptoribus Romanis persuasum fuerit. Berlin: Mitscher und Röstell.
 GOUDSMIT. The Pandects. Trans. Gould. Longmans.
 HISTOIRE littéraire de la France. Ouvrage commencé par les Religieux Bénédictins de la congrégation de Saint-Maur et continué par des membres de l'Institut. Tome XXVI. Paris: Firmin Didot Frères.

- IGONVET. Histoire Administratives des Communes du Midi de la France. 1^{re} série, No. 1. Sainte-Foy de Peyrolières, depuis 1615 jusqu'à l'an xii. de la Révolution. Toulouse: Baylac.
 JAUNEZ-SPONVILLE, Octave. Histoire de la révolution italienne. Paris: Dentu.
 KÜRSCHNER, F. Die Urkunden Herzog Rudolf's IV. v. Oesterreich [1358-1365]. Wien: Gerold's Sohn.
 LOUDON'S Briefe. Beiträge zur Charakteristik Loudon's und der Geschichte d. 7jähr. Krieger. Hrsg. Karl Buschberger. Wien: Gerold's Sohn.
 MARTIN, C. Omnium concilii Vaticani quae ad doctrinam et disciplinam pertinent documentorum collectio. Paderborn: Schöningh.
 NERVO, M. le Baron de. Histoire d'Espagne depuis ses origines. Paris: Michel Lévy Frères.
 POTTHAST, A. Regesta pontificum Romanorum inde ab anno post Christum natum 1198 ad annum 1304. Berlin: v. Decker.
 RICHTER, G. Annalen der deutschen Geschichte im Mittelalter. 1 Abth. Annalen d. fränk. Reichs im Zeitalter der Merovinger. Halle: Waisenhaus.
 SCHIMMER, Gust. Ad. Statistik d. Judenthums in den im Reichsrathe vertretenen Königreichen und Ländern. Wien: Gerold's Sohn.
 SOMMER. L'Odyssée d'Homère. Chants I.-VIII. Paris: Hachette.
 SUCHIER, H. Ueber die Quelle Ulrichs v. dem Türftin und die älteste Gestalt der prise d'Orange. Paderborn: Schöningh.
 TEUFFEL. History of Roman Literature. Trans. T. Wagner. Bell and Co.

Philology.

Διήγησις ὁρασιώτης τοῦ θαυμαστοῦ ἀνδρὸς τοῦ λεγομένου Βελισαρίου, nach der Wiener Handschrift zum ersten Male herausgegeben von Wilhelm Wagner. Hamburg. 1873.

DR. W. WAGNER, who in 1870 edited the first part of a volume of *Medieval Greek Texts* for the Philological Society, has lately published at Hamburg the text of the poem of *Belisarius* from the hitherto inedited Vienna MS. The text by which this composition has up to this time been known is that of the Paris MS., and this has been published more than once, and, among other editors, by Dr. Wagner. The poem, as it appears there, is generally allowed to be the work of Georgillas, the author of the *Plague of Rhodes*, though in the preface to his present work Dr. Wagner gives up the view which, following Koraës and others, he maintained in his *Medieval Greek Texts* (p. 115), that Georgillas was also the author of the *Lament on Constantinople*. The principal interest attaching to the text now published arises from its being in reality another and earlier version of the same poem, which Georgillas must have had before him when he wrote his *Belisarius*, so that he rather expounded and amplified it than composed an original work. The earlier poem contains 556 lines as compared with the 840 of the later, and Dr. Wagner has drawn out in an interesting manner in his preface the contrast in political tendency between the two. The text has been edited with Dr. Wagner's usual care, and is accompanied by well-judged emendations. That this is not an easy task will be understood by anyone who has studied mediæval and modern Greek, since it requires much ingenuity and close acquaintance with the various branches of the literature to recognize words in the peculiar and sometimes perverted forms in which they appear; and this is rendered all the more difficult by the narrow area of literature from which we draw our knowledge of the vocabulary. The notes will be found especially valuable by students of modern Greek from the light they throw on the history and etymology of words.

H. F. TOZER.

A *T* Conjugation, such as exists in Assyrian, shown to be a character of early Semitic speech, by its vestiges found in the Hebrew, Phœnician, Aramaic, and Arabic languages. By Richard Cull. F.S.A. Extracted from the *Transactions of the Society of Biblical Archaeology*, vol. 2. London: 1873.

IN his memoir on the *t* conjugation Dr. Cull claims to have made "the first announcement of the existence of *t* conju-

gations in Hebrew, Phœnician, and other Shemitic dialects, like those found in the Assyrian" (p. 24); it is difficult to see with what justice. By a *t* conjugation he means a secondary verbal form, produced by the insertion or prefixing of a *t*. Surely such elementary books as Gesenius' Hebrew and Wright's Arabic Grammar, to say nothing of others, have long testified to the existence of such forms in Semitic. "The fact is," says Dr. Cull, "that the profoundest Hebrew scholars, such men as Fürst (!), could not account for this *t* until the recovery of the long-lost Assyrian language enabled them to do so; and no Hebrew scholar appears to have applied this knowledge of the Assyrian to the elucidation of the Hebrew language" (p. 17). It would really almost seem as if Dr. Cull were unaware of the numerous illustrations of Hebrew contained in the Assyriological works of M. Oppert, Professor Schrader, and our countryman Mr. Sayce. There is indeed a reference to the last-mentioned scholar at the foot of page 20, but a strangely inaccurate one.

The paper as a whole is extremely disappointing. The intrusive *t* in all the instances mentioned has been often observed before, and in several of them explained on a principle, as it seems to me, identical with that of Dr. Cull. His sole merit, which I by no means wish to disparage, consists in having formulated this principle more distinctly and traced it to a peculiarity of early Semitic speech, though the way had been already pointed, so far as nouns with *t* prefixed are concerned, by Mr. Sayce in page 110 of his *Assyrian Grammar*. But was it necessary to imbed this very slight contribution to Semitic philology in twenty-nine printed pages, bristling with self-assertion, but derived partly from Fürst, partly from the material common to all students of Assyrian?—to raise the expectations of readers by promising an investigation into all the Semitic dialects, and to redeem the promise in so perfunctory a way? I am afraid, too, that Dr. Cull's readers will not be prepossessed in his favour by his blind idolatry of Fürst—a prophet, as it would seem, out of his own country. He twice misrepresents Gesenius (pp. 7, 9) by neglecting to consult the *Thesaurus*; at the foot of page 12 he falls out with Fürst through not having consulted Hupfeld on Psalm vi. 6; on page 25 he argues from a reading of Pænulus i. 8 which only exists in the imagination of Dr. Fürst; he is unaware (p. 10) of Schlottmann's able and thorough discussion of the etymology of עֲשֵׂתָה (*Die Siegestsäule Mesa's*, p. 43), though that eminent Orientalist is wrong, where Dr. Cull is right, on the origin of the deity called Ashtoreth, which is properly non-Semitic. The pointing of the Hebrew is occasionally faulty; but I do not wish to accuse Dr. Cull of such a heinous offence.

T. K. CHEYNE.

THE AGE OF PATANJALI.

To the Editor of the ACADEMY.

SIR,—Allow me to say a few words with regard to Prof. Weber's remarks on my article on the age of Patanjali contained in his letter to you published in the number of the *Academy* for the 15th of March last.

The passage on which I base my conclusion that Patanjali was a contemporary of Pushpamitra is *not* the same as that pointed out by Prof. Weber twelve years ago. The latter occurs in Patanjali's comments on Pāṇini I-1-68, and is consequently in the first part of the first chapter, *i.e.* in that portion of the Mahābhāṣya which was printed at Benares under the superintendence of Dr. Ballantyne, to which alone Prof. Weber seems to have had access (see *Ind. Ant.*, vol. i., p. 244, note); while the former occurs in the comments on Pāṇini III-2-123, and is consequently in the second part of the third chapter. Prof. Weber's passage contains the word *Pushpamitra-Sabha*, "Court or assembly of Pushpamitra," and the only conclusions it warrants are that

Patanjali could not have lived before Pushpamitra and that this latter was a king. Whether he lived at the same time with Pushpamitra or after him the passage does not enable us to decide. And Prof. Weber himself does not go further in his deductions in his review of Dr. Goldstücker's Pāṇini (*Ind. Stud.*, vol. v.) So far is he from thinking that Patanjali was a contemporary of Pushpamitra, that he is of opinion that he lived about 25 A.D., *i.e.* nearly 170 years after Pushpamitra. On the other hand, the passage I have for the first time brought to notice contains the words *iha Pushpamitraṃ yajayamah*, "Here we sacrifice for Pushpamitra," *i.e.* "as his priests we perform the sacrifice instituted by him." This is given as an instance of a rule laid down by Kātyāyana that the present tense should be used to denote an action that has begun but not ended. The action of sacrificing for Pushpamitra must have begun some time before Patanjali wrote the passage, and was in continuance and had not ended at the time he wrote it. For it is only when we understand the instance thus that it serves as an illustration of the rule. The conclusion therefore follows that Patanjali was Pushpamitra's contemporary. The details of the argument are given in my article in the *Antiquary*, and I have there quoted these two passages separately with references and given the different conclusions that follow from them as clearly as I could; but still Prof. Weber does not see that they are two distinct passages. I am at a loss to conceive how it could be so. I have recently brought to notice a third passage in the Mahābhāṣya in which Pushpamitra's sacrifices are spoken of (see *Ind. Ant.*, vol. ii., p. 69).

A letter from Prof. Weber containing a similar remark on my article is published with my reply to it in the *Indian Antiquary* for February last. I have there considered his argument for bringing Patanjali down to 25 A.D. contained in his review of Dr. Goldstücker's Pāṇini referred to above. All the so-called "important details" of the argument are based on the supposition that the word *Mādhyamika* occurring in one of the two instances pointed out by Dr. Goldstücker denotes the Buddhist sect of that name. This supposition, improbable in itself, necessitates a string of other suppositions still more improbable. Some of them are these: that the dynasty known to Hindu writers by the name of *Turushka* was known to Patanjali by the name of *Yavana*, though there is the clearest evidence to show that the latter name was applied to the Greeks during the two or three centuries immediately preceding the Christian era; that Kanishka, himself a Buddhist, persecuted Buddhists and pushed his conquests up to Sāketa or Oude; and that all the events concerning the Mahābhāṣya recorded in the Vākya-padīya and the Rājataranginī took only about twenty years to occur, *viz.*, that the Mahābhāṣya was written, that it obtained very great reputation over a large part of the country from Kashmir in the north-west to the Deccan, and came to be acknowledged as a work of authority, that it was studied generally, that in the "course of time" it ceased to be studied, and that it was brought into use again by Chandrāchārya and others. There is also a philological objection to the interpretation. Some other explanation, therefore, of the word *Mādhyamika* must be sought; and this is furnished to us by Dr. Kern, who has called attention to a passage in the Varāha-mihira Sanhitā in which a people of the name of *Mādhyamikas* is mentioned. My argument will be found fully stated in my reply to Prof. Weber spoken of above.—Yours truly,

RAMKRISHNA G. BHANDARKAR.

Bombay, 19th April, 1873.

PEHLEVI INSCRIPTIONS.

To the Editor of the ACADEMY.

Mangalore, S. Canara, Madras Presidency, May 12th, 1873.

SIR,—During a recent tour through the Cochin and Travancore States I found some Pehlevi inscriptions which go to prove that there were once large settlements of Persians, probably Manichæans, in S. India. This fact will be of interest to Sanskritists since Prof. Weber's admirable essay on the *Rāmāyana*. Prof. Weber has shown reasons for suspecting Greek influences in the composition of that poem; and it will now, in consequence of this discovery, be possible to prove that much in the modern philosophical schools of India comes from some

form of Christianity derived from Persia; and this fact at once explains also the origin of the modern Vedānta sects in Southern India exclusively.

In a Syrian (*i.e.* Nestorian) church at Koṭṭayam in Travancore, said to be one of the oldest in the country, I found at the back of a side-altar a granite slab with a cross in bas-relief on it, and round the arched top a short sentence in Pehlevi; at the foot of the cross a few words in Syriac. On looking round the church I found a similar but evidently older tablet built into the wall. This tablet is nearly covered by white-wash, but shows only a Pehlevi inscription. There is a similar tablet in the Mount church (near Madras) which has long been the property of the Portuguese.

Since my return to Mangalore I have found in Friar Vincenzo Maria's *Viaggio all' Indie Orientali*, p. 135 (Roma, 1672), mention of several such tablets; he particularly mentions the ones at Cranganore and Meliapore (*i.e.* Madras), and takes them to be relics of the mission of St. Thomas to India. As there is hardly a trace left of Cranganore, it would be useless to search there; but the older Syrian churches (at Nirāṇam, Kāyarkulam, &c.) will no doubt furnish other copies. In this very out-of-the-way place I have nothing to help in deciphering the Pehlevi inscription, which is nearly the same on the three tablets I have seen; the first few signs, only, differ. The last word in all looks like *afzūd* (may it be increased). As soon as I can get it lithographed I shall send copies to the principal European scholars who occupy themselves with Pehlevi.

The number of these tablets proves that there must have been communities in several places, and those large enough to have churches both on the S.W. and S.E. coasts of India. Cosmas (beginning of the sixth century A.D.) mentions Christians in Male (*i.e.* S.W. India), and that there was a Persian bishop at Kalliana, *i.e.* Kalyānapūr, near Uḍupi, and in this province—a place always reputed to be one of the earliest Christian settlements in India. Nor were these Persians disliked as foreigners are now by the natives of India. Before the beginning of the ninth century A.D. they had acquired sovereign rights over their original settlement, Maṇigrāmam, by a grant from the Perumāḷ. These Persians were thus established long before the origin of the modern schools of the Vedānta, and the founders of these sects were *all* natives of places close to Persian settlements. Časikarācārya was born not far from Cranganore where the Persians first founded a colony; Rāmānuja was born and educated near Madras; and Madhvācārya, the founder of the sect which approaches nearest of all to Christianity, was a native of Uḍupi, a place only three or four miles south of Kalyānapūr. A comparison of the doctrines of these sects with those of the Manichæans will I think settle the question; but I must reserve that for another occasion. That these Persians were Manichæans is, I think, to be concluded from the name of their settlement, Maṇigramam. This can only mean "Manes-town;" the only other possible meaning, "Jewel-town," is utterly improbable.

Prof. Weber has shown that the Brahmasamāj doctrines are an unacknowledged result of Christian missions in this century; the S. Indian Vedānta sects must be taken as a similar result of perhaps the earliest Christian (though Manichæan) mission to India.

How close the connection between Persia and India was in the sixth century A.D. is also known from the history of the European versions of the *Pañcatantra*. The existence of this work in India was then known to the Persians, and this knowledge presupposes a greater knowledge of Indian matters by foreigners than has ever since been the case up to the end of the last century.

I may remark also that the facts I have mentioned above render it probable that Būrzweih or Barzūyeh, who first translated the *Pañcatantra* into Pehlevi, was actually a Christian, as the Arab historian, Ibn Abu Oseibia, states. The S. Indian Sanskrit *Pañcatantra* is the oldest yet discovered (see Prof. Benfey's note, *Academy*, vol. iii. pp. 139-140); may not Bārzūyeh have got his copy in S.W. India?

Patriotic Hindus will hardly like the notion that their greatest modern philosophers have borrowed from Christianity; but as they cannot give an historical or credible account of the origin of these Vedāntist sects, if we take the above facts into consideration, there is

more against them than a strong presumption, for these doctrines were certainly unknown to India in Vedic or Buddhistic times.

I mentioned in my last letter the discovery of an old Jain version of the *Rāmāyana* in Canarese. This is certainly more than a thousand years old, and differs greatly from the *Vālmiki-Rāmāyana*. The Tamil version (by Kampan) is also very old, and deserves examination if the question of the original form of the Sanskrit epic is to be *really* decided. I hope soon to be able to give you some account of the Canarese version, as I have found an excellent MS., written about 420 years ago, which is wonderfully correct.—I am, faithfully yours,

A. BURNELL.

Notes and Intelligence.

Mr. Alexander J. Ellis is engaged on an English translation of Helmholtz's great work on the theory of musical tones, *Die Lehre von den Tonempfindungen*.

Mr. Ellis hopes to complete the printing of the text of the fourth part of his *Early English Pronunciation* by the 1st September of this year. But as the preparation of the indexes will be very laborious, the issue of the volume cannot be expected before the middle of May, 1874.

Edward Thomas, Esq., F.K.S., has been elected a Corresponding Member of the Institute of France.

We learn from *Trübner's Record* that a complete set of the *Jaina Aṅgama*, with commentaries, has recently been added to the Royal Library of Berlin—the first complete set ever brought to Europe.

We learn that the Government of Dutch India has just presented to the Royal Asiatic Society, through the Batavian Society of Arts and Sciences, a collection of upwards of 300 magnificent photographs representing part of the antiquities of Java. In 1862 the late Rev. J. F. G. Brumund was, at the suggestion of the Batavian Society, appointed by the Dutch Government to survey, and furnish a detailed account of, the Hindu remains in Java. This important undertaking was unfortunately cut short in the following year by the untimely death of the reverend gentleman. He left, however, a highly interesting account of several of the most important monuments, which was afterwards published in vol. xxxiii. of the *Verhandelingen van het Bataviaasch Genootschap* (1868). Shortly after Heer van Kinsbergen was entrusted with the task of reproducing by accurate photographs the most interesting and characteristic of these monuments, in detail and from a scientific point of view. The collection, of which a copy has now reached England, is the first instalment of a series which when finished will furnish an excellent and pretty complete view of the pre-Mohammedan remains in Java. The same gentleman is at present engaged in reproducing the splendid and extensive remains in the residency of Radoe, generally known under the name of Boro-Boedoer, after which his photographic apparatus will be brought to bear on monuments of still earlier periods in that part of Java. Thanks to the enlightened policy of the Government of Dutch India and the praiseworthy and successful labours of the Batavian *Genootschap* the student of Eastern art will thus in a few years be able to avail himself of what will have to be considered as the first comprehensive view of the antiquities of an Eastern country. It may also be hoped that the Batavian Society will soon be able to procure the services of a competent scholar to continue in the same efficient manner the archaeological labours of the late Mr. Brumund.

Mr. Burnell will shortly issue the *Sāmavidhānabrāhmaṇa*, with Śāyana's comment, a translation and index of words, to be followed by the *Devalādhyāyabrāhmaṇa* and the *Shadīmsabrāhmaṇa*. He is also publishing specimens of some minor dialects of the western coast of Southern India, consisting of translations of St. Matthew xiii. 1-34. Two of these, viz. in the Konkani, spoken by the Roman Catholics of South Canara, and in the Kodagu (Coorg) language have already been issued.

The same industrious scholar intends to prepare, together with the Rev. C. E. Kennet, a new translation of Beschi's *Shen Tamil Gramma*. The translation of Dr. Babington has long been out of print. "This new translation will be based on additional MSS. of the original Latin (which have never been printed), and one of which is partly in Beschi's autograph. The introduction will give an account of the origin of the Dravidian Grammars and their Sanskrit originals, most of which exist in manuscript and are unknown to European scholars except perhaps by name."

The address of M. Paparregopulos, the President of the National University at Athens, contains an account of his visit last year to our English Universities. Although he was not more than two months in England, his account of them is remarkably accurate. The University of London especially excites his admiration, but he was also much pleased with Oxford and Cambridge, where the hospitality of the Master of Trinity calls forth a warm acknowledgment. He notices the criticisms passed upon the system of Fellowships by the Rector of Lincoln and Prof. Max Müller; and warmly praises "the combination of freedom and obedience, of spiritual and bodily exercise" in the life

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 73.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Tuesday, July 1, and Advertisements should be sent in by June 27.

British Association for the Advancement of SCIENCE,

22, Albemarle-street, London, W.

The NEXT ANNUAL GENERAL MEETING will be held at BRADFORD, commencing on WEDNESDAY, September 17.

President Elect.

J. PRESCOTT JOULE, D.C.L., LL.D., F.R.S.

NOTICE to CONTRIBUTORS of MEMOIRS.—Authors are reminded that, under an arrangement dating from 1871, the acceptance of Memoirs, and the days on which they are to be read, are now, as far as possible, determined by Organizing Committees for the several Sections before the beginning of the Meeting. It has therefore become necessary, in order to give an opportunity to the Committees of doing justice to the several communications, that each Author should prepare an Abstract of his Memoir, of a length suitable for insertion in the published Transactions of the Association, and that he should send it, together with the Original Memoir, by book-post, on or before September 1, addressed thus—"General Secretaries, British Association, 22, Albemarle-street, London, W. For Section....." If it should be inconvenient to the Author that his Paper should be read on any particular day, he is requested to send information thereof to the Secretaries in a separate note.

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THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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REGISTERED FOR

TUESDAY, JULY 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Idylles Prussiennes. Par Théodore de Banville. Paris : Lemerre.

THERE OCCURS in La Mettrie's hoaxing dedication of *L'Homme Machine* to Haller one of those *traits de flamme* which even Voltaire was obliged to recognise in the joyous doctor. Pronouncing a half sincere, half exaggerated encomium on the merits of science and art, he complains that intellectual and artistic pleasures are in fact too intense and entrancing. Their intensity blunts the enjoyment of them. But fortunately there is a remedy, and it is to be found in the pleasures of sense. In order, he says, properly to enjoy the delights of study and culture, "j'ai quelquefois été forcé de me livrer à l'amour." Even if allowance be made for the paradoxical irony of the sentiment (and La Mettrie is usually most nearly sincere when he is most paradoxical), it still affords glimpses of a reading of the life of enjoyment, which if not exactly new has not often been attempted in modern times. It would be interesting to consider how far an impartial devotion to Muse and Grace, to Athena and Aphrodite is a possibility; how far a genuine enthusiasm for sensual pleasure can be combined with a genuine appreciation of study and of art. The consideration, unfortunately, would have to be purely theoretic: for practical examples we must wait for a distant future—till sensualists are philosophers, or philosophers sensualists.

But should there ever arise a sect or society of aspirants to the perilous and doubtful glory of thus serving two masters, the poet whose name stands at the head of this article would have an undoubted claim to the honours of their laureateship. For almost alone among the modern romantic school of Europe, the descendants of Byron, of Shelley, and of Heine, M. Théodore de Banville has managed to introduce measure and order into the service of his peculiar gods. He takes the yew and the roses which form the crown of Aphrodite; but they are poisonless and thornless to him, or rather the poison produces but a generous intoxication, and the thorns act only as a harmless stimulus. His passion is neither forced nor stunted, his expression neither laboured nor over-confined—the rule of "not too much" appears to be observed without effort as without error. His muse is *chercheuse d'infini*, but not *ad infinitum*. In his celebration

of the mysteries there is neither howling, nor writhing, nor gnashing of teeth. Nemesis and Koros seem to pass him by. The utmost penalty paid for any raptures in which he may indulge—nor are they few or mean—is a graceful and rather salutary melancholy, which seems to have the effect at once of soothing the nerves for what is past and of strengthening them for what may be to come. Among his despairing brotherhood he alone despairs not of the earthly paradise, and evades by some happy expedient of temperament or of art, the fatal contact of the fiery sword.

Although ranking in point of form and character among the latest and most modern of writers, Théodore de Banville is by no means in the literal sense a young poet. He belongs in fact to the generation which came between the great stars of 1830, now, alas! all but departed, and the rising celebrities of the Empire and the third Republic. It is thirty years and more since the *Cariatides* appeared. During this time the productiveness of the author has been constant; but his works have appeared in a very large number of small publications many of which have been for some time out of print, and the complete edition lately undertaken by M. Lemerre will afford the first fair opportunity of judging the author's work and genius as a whole. The present article will not attempt to do more than notice three productions which present M. de Banville under curiously different aspects—that is to say, the work now introduced as text, the *Odes Funambulesques*, and the most remarkable poems which formed part of the *Parnasse Contemporain* for 1869, the publication of which was interrupted by the war. Naturally the reader will not look for a very positive display of the qualities which we have praised, in such a work as the *Idylles Prussiennes*. The poetical merits of the vast volume of verse poured forth in France during 1870-71 are as a rule but small. Helpless rage is unfortunately apt to be undignified, and no Prometheus has yet appeared in France as an exception to the rule. Few if any French poets have resisted the temptation to console themselves for perpetual, not to say disgraceful, disaster by extravagant self-laudation. Now the only way of rendering such extravagance tolerable is to clothe it in rhetoric of sufficient power and gorgeousness; and declamation is by no means M. de Banville's forte. In this he differs strikingly from another great contemporary poet, Leconte de Lisle, from whose works specimens of

almost perfect declamation—such as for instance the wonderful passage in *Les Runiois* beginning “Vous ne chanterez plus sur vos harpes de pierre”—can be produced in profusion. But our author has neither miscalculated his powers nor attempted an unsuitable task; on the contrary he has given yet another example of the reticence and self-control for which he has already been praised. Avoiding the common and fatal error of pitching the voice in the popular key, he has by skilful depression and transposition obtained a suitable style—the style of meditative and almost humorous satire, of which he is a master. The result, making allowance for the enormous difficulties of subject and treatment, is certainly a success; perhaps it is not unsuccessful even if such allowance be not made. It is not to be denied that the wit is sometimes forced, and the mirth not unfrequently a mere *rire jaune*, but on the whole Théodore de Banville may be safely pronounced to have achieved more thoroughly than any other French poet the perilous and ungrateful adventure which he has undertaken. There are, of course, many pieces in the volume which are not entitled to any share of this praise. Some are trivial; a few, such as “Cauchemar” and “Le Mourant,” are not free from the immoderate invective and the theatrical patriotism which disfigured “L’Année Terrible.” “Le Turco,” whatever it may be to French taste, is to English critical eyes simply vulgar. But there are others which show none of these faults. “La Bonne Nourrice” gives a fine picture of Death, helmeted and purple clad, lulling her beloved Bismarck to sleep. “L’Ane” and “Les Rats” are two decidedly good satirical pieces, suggested by the omnivorous habits of the besieged Parisians. In the former the poet after a most quaint description of the merits, defects, and sufferings of the unlucky animal, who after all

“Nous croit bons, rêveur charmant !
Nous flatte de sa longue queue,
Et nous regarde tendrement
De sa vague prune bleue :”

laments the final injury—the ass is actually eaten! Nay more, he is found so good that

“A l’avenir on mangera
Toujours des ânes, sans nul doute !”

Then suddenly turning from asses literal to asses metaphorical, he begs various personages, in a formidable list, to reassure themselves. Some of them must escape :

“Jamais nous ne pourrions venir
A bout de manger tous les ânes !”

“Marguerite Schneider” is a really fine address to the young damsel whose fondness for earrings gave her so evil a notoriety. The poet proposes as the most appropriate pendants two drops of blood, ruby-like and ever ready to fall. But the gem of the book is without doubt “L’Épée.” This piece forms a perfect and possibly a designed counterpart to the famous sword-song of de Banville’s namesake Körner. It deserves quotation at length, but we must unwillingly leave it unquoted here.

Of the whole volume it may be said that the form is incomparably superior to the matter, and this fact, which is not likely to render it popular with the average reader, must always give it a special interest in the eyes of the instructed and critical lover of poetry.

Still dearer to such a critic should be the *Odes Funambulesques*, and for the same reason. It is probable indeed that this wonderful book has not found many English readers, not merely because of its multitude of minute Parisian details and personalities, but still more, it is to be feared, because comparatively few Englishmen have the patience or the inclination to observe the artistic excellence of its grotesque extravagances. An English critic once held it up as a sort of scarecrow, an instance of the inevitable tendencies

of the romantic school. If it be so, so much the better for the school which can “inevitably” produce such poems as “La Belle Véronique,” “Variations Lyriques,” “La Ville Enchantée,” and above all the epilogue, and so to speak moral, of the book, “Le Saut du Tremplin,” where

“Enfin de son vil échafaud
Le clown sauta si haut, si haut,
Qu’il creva le plafond de toiles
Au son du cor et du tambour,
Et le cœur dévoré d’amour
Alla rouler dans les étoiles.”

So much the better for the school which can thus vindicate the assertion, made in the fine poem which does duty here as prelude, that the artist, be he orator, prophet, or buffoon, whatever be his audience and whatever his message, is

“Toujours au dessus de la foule.”

In *Idylles Prussiennes* we have the poet struggling with, and in a great degree mastering an unpromising, uncongenial, but inevitable subject; in *Odes Funambulesques* we see him voluntarily assuming the motley that he may prove the omnipotence and omnipresence of his art, and its fitness at all times and in all places for making the common as if it were not common. But to relieve this view of Art Militant, now with helmet and sword, now with cap and bauble, it is only fair to give a glimpse of the poet’s Art Triumphant, in her peculiar sphere and treating congenial subjects, representing above all things

“The crescent life and love the plenilune.”

For this purpose Théodore de Banville’s contributions to the *Parnasse Contemporain* (November, 1869) are especially suited, being his last production before the disturbing events of 1870. They consist of one poem of some length, “La Cithare,” admirable in style and language, and recalling by its semi-classical manner the earlier works of the poet, and of ten ballads composed “à la manière de François Villon.” These latter are all good, especially that “Des Belles Chalonaises,” and “De la Bonne Doctrine;” but there is one of such supereminent beauty that it must be quoted at length. It is entitled “Ballade de Banville aux Enfants Perdus.”

“Je le sais bien que Cythère est en deuil !
Que son jardin, souffleté par l’orage,
O mes amis, n’est plus qu’un sombre écueil
Agonisant sous le soleil sauvage.
La Solitude habite son rivage.
Qu’importe ! allons vers les pays fictifs !
Cherchons la plage où nos désirs oisifs
S’abreuveront dans le sacré mystère
Fait pour un chœur d’esprits contemplatifs :
Embarquons-nous pour la belle Cythère.

La grande mer sera notre cercueil :
Nous serverons de proie au noir naufrage,
Le feu du ciel punira notre orgueil
Et l’aiglon nous garde son outrage.
Qu’importe ! allons vers le clair paysage.
Malgré la mer jalouse et les récifs,
Venez, partons comme des fugitifs,
Loin de ce monde où souffle le délétère.
Nous dont les cœurs sont des ramiers plaintifs
Embarquons-nous pour la belle Cythère.

Des serpents gris se traînent sur le seuil
Où souriait Cypris la chère image.
Aux tresses d’or, la vierge au doux accueil !
Mais les Amours sur le plus haut cordage
Nous chantent l’hymne adoré du voyage.
Héros cachés dans ces corps maladifs,
Fuyons, partons sur nos légers esquifs
Vers le divin bocage où la panthère
Pleure d’amour sous les rosiers lascifs :
Embarquons-nous pour la belle Cythère.

ENVOI.

Rassasions d’azur nos yeux pensifs !
Oiseaux chanteurs, dans la brise expansifs,
Ne souillons point nos ailes sur la terre,

Volons, charmés, vers les dieux primitifs !
Embarquons-nous pour la belle Cythère."

What can or need be said of such a poem as this but that in thought, expression, language, metre, rhythm it is perfect? that the sequence of the ideas is only equalled in beauty and completeness by the cadence and harmony of the accompaniment? If lyric verse be, as it is in truth, the nominative of poetry, whence all other kinds are but cases and deflections, Théodore de Banville needs to advance no other proofs to assert his claim to a place among the first of contemporary poets. GEORGE SAINTSBURY.

Kinder der Welt. A Romance. By Paul Heyse. Hertz, Berlin. 1873.

By and By. An Historical Romance of the Future. By Edward Maitland, author of "The Pilgrim and the Shrine." Bentley. 1873.

THESE two works have this much in common, that they are both evidently intended to prove something, but what, and more especially to whom, is so obscure that we are inclined to echo the end of Mr. Maitland's preface: "Who but the artist knows the artist's ideal?" As works of art, however, it would be unfair to class them together, for though Heyse has always been least successful in his longest works, and in this, his first full-length romance, has further burdened himself with the dead weight of a didactic purpose, his style is always finished, and he has always some scenes and characters touched in with real grace and poetic originality; while *By and By* is both incoherent in design and careless in composition—essentially what Mr. Hamerton calls an "undisciplined" book. If, as seems probable, the purpose of both writers is to recommend the precise variety of theism or atheism professed by the principal character in each work, it may be doubted whether the means are discreetly chosen. It is usual in the early days of a religious movement for novels to be written to illustrate the doctrines and practices of believers and the iniquity of the outer world; but religious novels have a bad name in literature, and to the unprejudiced, profane public it will scarcely be a recommendation of the religious views of Dr. Strauss or our undogmatic English Theists that they too can inspire fictions which, like those of Mrs. Sherwood or Miss Sewell, may be extremely edifying to the faithful, but will hardly be found convincing except by the converted. On the other hand we can scarcely understand how the faith of full-fledged philosophers, in whose mouth Schopenhauer and Comte and Spinoza and the grey matter of the brain are familiar household words, should need strengthening by such an exercise of the novelist's prerogative as consists in making his villain a candidate of theology. But perhaps we ought not to assume that *Kinder der Welt* is exactly meant to prove the doctrines advocated by all the virtuous characters in the book: it may be only intended to illustrate the thesis that opinions about the cause and constitution of the universe have very little influence either for good or evil upon the passions or conduct. At least Edwin, the hero, who is an extremely enlightened philosopher, falls in love as violently and unreasonably as the most antiquated theist, and has to have a brain fever before he is ready to be consoled by a young lady to whom he had been giving lectures in philosophy until her father's orthodoxy took alarm. When the lectures were interrupted she begins to die for love, partly of Edwin, partly of philosophy, but is restored by a declaration in the following terms: "What I feel for you—he stopped with a gentle smile—we had not got so far as Spinoza for the scholastic term to be familiar to you:—but look! the feeling of man towards what that high sage called God, the absolute Substance which acts and wills and embraces everything, that exaltation of every feeling

which follows when we plunge ourselves in thought into the being of this All and One—he calls 'intellectual love.' It is neither a jest nor a blasphemy, but the simple expression of truth when I say, with such a love I love thee, Leah! That blind, daemonic passion otherwise called love is washed out of my blood, I hope for ever. What now lives in me is the blessed knowledge that thou art the best, the profoundest, most gracious, and most noble human shape that has ever appeared upon earth, the One and All in which my world is contained and resolved, and that the man whom thou shouldst love and to whom thou wert willing to belong were the happiest of mortals!" There are pages enough in this vein to be a severe trial to the patience or gravity of irreligious readers. The first half of the book is the best, and the character of Balder, Edwin's younger brother—a beautiful cripple, who never leaves his garret-lodging, but finds in his friends, his verses, his turning-lathe, and the shoemaker's daughter who waits on him all the elements of enjoyment which attach more fortunate mortals to life—is the most attractive feature in it: the author's bright, sympathetic treatment of the conception is in his best manner. But Balder dies, partly because the shoemaker's daughter is betrothed to somebody else, and his friends instead of arranging for his interment without religious rites, or with such rites only as they might please to invent, accept the ministrations of an orthodox clergyman and then are indignant at his thinking it necessary to pray for the sinful soul of the departed. If the "children of this world" are as numerous in proportion in Germany as Herr Heyse implies it is strange that their practice in this respect should be so much less logical than in France or even in England. The character of Toinette, Edwin's first love, is also open to exception, especially in a work containing a good deal of physiology. The author seems to consider that to be *von adel*, even if only on the father's side, is an organic disease affecting the blood, passing the powers of philosophy to remedy, and condemning the victim to take refuge in discreet and dignified suicide. He fails to see that a moral peculiarity if it could be accounted for scientifically by physical causes would cease to be a subject for imaginative treatment: constitutional insanity is of no more use to a novelist than hereditary gout: and on the other hand if the defects in Toinette's moral organisation were only such as ordinary mortals may have to encounter it is a confession of weakness on behalf of the doctrine which she shares with her friend the professor that it cannot help her under such a very ordinary misfortune as marriage to a stupid count. The book is unsatisfactory as a whole because, while it discusses serious questions at considerable length, it takes a solution of them for granted which would have been found much more fruitful if the grounds of its acceptance had been more clearly apprehended.

Of *By and By* there is really little to be said unless the author means this description of a successful book to be applied to it: "As it consisted of ideas already floating more or less vaguely in men's minds, and flattered the most popular feelings, it was very appropriately called, *In the Air; or, Made to Sell.*" Even an extravaganza wants to have some internal consistency, and the most obvious objection to this "romance of the future" is that it does not describe the future either as the author supposes that it will be or as he thinks it desirable that it should be. Ballooning and telegraphy are the only arts or sciences in which material progress is represented as having been made, and constant references to trifling controversies of the present day, which will certainly be forgotten before the end of the century, show how little trouble the author has taken to realize his own invention in all its details. It is extremely doubtful

whether in "*Pan trois mil*," or whatever is the date of Mr. Carol's life and adventures, the Albert Hall will still be regarded as a "noble monument," and it is scarcely conceivable that at that remote date, and after a great intellectual movement which is called the "Emancipation," the small surviving sect of Christians known as the "Remnant" should be able to resist the spread of aerostatics as irreligious and generally preserve intact the traditions of the religious school against which the author's animadversions are directed. But if the picture given of the future is too inconsistent to be meant for prediction, it is so unattractive that it cannot be intended as a model or ideal to be aimed at. Besides the limitation implied in the nature of things—for of course an author cannot make his wisest characters utter more wisdom than he can himself invent for them—it is certainly high treason against the race to represent posterity as actually more foolish than the present generation, and this is what, consciously or otherwise, Mr. Maitland certainly does. Not content with traducing men and women, he actually invents bodily angels who can be reached by balloon; but he does not explain how their existence has escaped the telescope if they reside in regions where the atmosphere is dense enough to support human life. The author has been at some pains to re-arrange the marriage laws of the future, apparently in the interest of unborn novelists who would have a fresh way of tormenting their heroes and heroines when it was possible not only to make them marry the wrong person, or fail to marry the right one, but to make them marry the right person in what might turn out to be the wrong way. These and other innovations are represented as leaving the world in essentials very much as they found it, and since Heyse's graver speculations tended to the same result, which is not an attractive prospect to the hopeful and credulous public which the religious novelist must be supposed to address, it may be doubted whether on this occasion it can be said that "the children of this world are in their generation wiser than the children of light." EDITH SIMCOX.

LITERARY NOTES.

The incontestable reputation which Sir Arthur Helps has earned as a lay preacher has on the whole been rather diffused than lowered by his unremitting productivity, which is always bringing him within the reach of new readers. This portion of his public will probably thank him for calling their attention by a very pretty reprint to his tragedy of *Oulita the Serf* (Strahan & Co.) The hero is a reforming Russian nobleman intimate with the Czar, who endeavours to cheat the hostility of the head of the police by marrying an influential princess. Before the marriage is accomplished he falls in love with the princess's favourite serf. His first scheme of buying his mistress is made very unnecessarily to subject her to peril of the lash, and he is driven to arson and homicide in order to rescue her. The princess has the generosity to provide him with a paper certifying that Oulita has been legally sold by her father to the hero's agent.

Oulita after living happily for a month under the protection of her lover gives herself up to the princess because she observes that anxiety to protect her is absorbing his powers and diverting him from his career of reform. The princess is of course won by her magnanimity and determines to make the lovers happy. Unfortunately the hero is arrested and sent off without delay to Siberia: Oulita however forces herself into the presence of the Czar, who for some incomprehensible reason decides that the scandal of a pardon will be mitigated by a loveless marriage (to be followed by a separation) between the hero and the princess. The princess is as eager as Oulita to sacrifice herself, but the hero whom they overtake on the road to Siberia explains that he cannot accept his pardon at such a price, whereupon Oulita kills herself in his sight under the absurd idea that he will then feel free to marry the princess.

This is not a more ridiculous story than that of most of the

Elizabethan tragedies, but in the Elizabethan age passion was not incompatible with dignity and habitual self-restraint was not a condition of self-respect: in *Oulita* the characters maintain an unbroken decorum which is only thrilling in combination with the most exact and finished realism; they are incapable of doing more than thinking aloud about the situation so as to bring in as much of the author's philosophy as can be done without too glaring incongruity. Even under these conditions the author philosophises with his usual measure of insight, though perhaps the limits of his insight become more conspicuous in a tragedy than in an essay or a dialogue: lookers on it is said see most of the game, but they never see what makes the game worth playing, if it is worth playing—which such books make us doubt. It should be added that the situations of the play, especially the last, are fine in themselves, though the author has known neither how to introduce them rationally nor how to use them passionately. The play contains several lyrics, which are not the only feature which reminds us of Sir Henry Taylor.

The turbid reveries that lie between boyhood and manhood are generally unconscious and inarticulate: people think little of them, and speak of them when they are over as nonsense that it does a young man good to have had knocked out of him. Mr. Sinclair's poems (Provost & Co.) are an attempt to embody and interpret these moods of morbid exaltation and depression. A sympathetic reader will find in them much heat, some sweetness, a little strength, even light enough for misty brightness but not for clearness or beauty. The verse moves stiffly but not without something of a manly gait, that might march or even dance—if it could get its lameness cured.

Mr. Drummond's book on the Life and Character of Erasmus (Smith, Elder, & Co.) is as good as it could be within the limits which the author has imposed upon himself. He has confined himself strictly to Erasmus' personality, and he has treated Erasmus as his own best biographer. In one sense this is true: Erasmus' letters contain materials for a copious life, and they are very lively and amusing, though to a certain extent monotonous. But without being deliberately uncandid Erasmus was continually posing; he was querulous, and he looked upon himself with the eyes of a man always repelling detraction and extorting recognition; moreover he had the tact, the modesty, the rhetorical skill to do all this with effect. The consequence is that a copious life of Erasmus based upon his own letters gives an impression of the man which perhaps his contemporaries would find it hard to recognise even when the necessary rectifications have been made. We doubt whether even in the account of Erasmus taking the vows Mr. Drummond's rectifications go far enough, and there can be little doubt that M. Du Laur has appreciated the true character of the sponging correspondence with Battus better. Both biographers have been duped by the audacious anachronism whereby Erasmus took up the position of a victim in his controversies with Bedda and other Catholics, though in fact he was treated with a forbearance which his reputation and plausibility of statement are hardly sufficient to explain, especially when we remember that he had no speculative basis for his unflinching loyalty to Rome in practice.

As it is impossible to write Erasmus' life fully except from the letters it is to be wished that Mr. Drummond had condensed the personal narrative, and utilised the space thus gained for a discussion of some of the numerous questions which naturally arise out of the relation of Erasmus to his age. What was the real internal condition of the great monastic and scholastic corporation which he attacked? how came it to be so completely separated in its interests and tendencies not only from the papal court but from the higher clergy? how far was the mendicant temper of Erasmus personal to himself? how far was it the result of the dependent condition which he shared with other scholars of the age? Of course these are collateral points, but they are quite as relevant to the main subject as the trite distinction between the Lutheran and Roman doctrine of justification to which Mr. Drummond has thought it necessary to devote a chapter, or the comfortable commonplace about civil and religious liberty which he repeats as complacently as if it were certain that Luther was a precursor of Locke.

Again, has everything been said about Luther and Erasmus when it has been explained to the comprehension of Exeter Hall that Erasmus really was a Roman Catholic except so far as he was a Rationalist? Would not a more detailed and chronological treatment of the subject have done something to confirm the popular impression that fear partly for his person, partly for his position, was the dominant though not the only motive of the great humanist's conduct throughout the last nineteen years of his life? It is true that he never had to do actual violence to his conscience, but was there not a time when his conscience reproached him for not supporting Luther with the whole weight of his authority yet unimpaired by tergiversation on the question of indulgences, when he believed he was substantially right? (to the last he recoiled much more from the lawlessness of Luther's action and from the headlong unreason of his method than from the brutality of his doctrine). Was there not another time when his conscience reproached him, though less loudly, for his complaisance to the tyrannical iconoclasts who had driven him from Basle?

The shortcomings of Mr. Drummond's book are at once more definite and less conspicuous than its merits: of the latter it is enough to say that the writer is always clear, trustworthy, and readable, and that his matter is always full enough and well digested. It is hardly a fault that he has made himself so much at home in Erasmus that he Latinises a proper name now and then in a way that might puzzle the uninitiated, giving us *e.g.* Pannonia for Hungary.

Art and Archaeology.

Monuments of Early Christian Art, Sculpture, and Catacomb Paintings. By J. W. Appell, Ph.D. Chapman and Hall. 1872.

A COMPLETE manual, with descriptive notices however slightly drawn up, of the monuments of early Christian art, comprising those to be found in all European cities, churches, cemeteries, &c., would satisfy a want generally felt; and if supplied with breadth of knowledge, with impartiality and clearness superior to all prepossessions of sectarianism, such a work might avail for determining the true import of evidences, in the monumental range, to the doctrines and practices of the ancient Church.

The small volume by Dr. Appell which is before me has somewhat higher claims than those modestly announced in its preface, being indeed a good deal more than a "catalogue" of such relics as "early Christian sculptures to be found in ecclesiastical buildings of Rome and other cities," and "the more curious catacomb paintings."

One may regret that such an opulent and highly valuable class of art-works as the Christian mosaics should be omitted from this learned writer's scope and pages. The productions of that art, applied to the illustration of sacred subjects in Rome and Ravenna alone, form a cycle for monumental records throwing light on the religious ideas, the devotional usages, the symbolism and priesthood of ancient Christianity. Marked by many analogies with the primitive art found in the cemeteries called catacombs, those mosaics display more of vigour and freedom, and at the average amount of the excellence distinguishing them, prove more impressive than the earlier or contemporary art fostered by the Church in other walks. A principal witness fails to obtain hearing, a chain of evidence is wanting, if these valuable and expressive art-works are omitted.

In the task undertaken, and within the limits prescribed to himself, our author fulfils his promise carefully, conscientiously, and with earnestness of feeling. Alike free from bigotry and from levity, he writes for no party, aims at no theological advocacy of preconceived doctrinal views; and his estimate of the bearings of early Christian art upon the dogmas and life of the ancient Church could not pos-

sibly offend either the Roman Catholic or the Rationalist. Arrangement, selection, citation of and reference to authorities are just as one can desire in this acceptable volume. The numerous engravings, shaded or outline, from well chosen subjects, add greatly to its value, and are all (so far as I can bear witness) correctly designed from the originals—the drawings thus produced having been, we are informed, executed with much care on wood by Mr. Andrew Reid. A few inaccuracies may be pointed out in the letter-press; and an occasional want of precision, where the author describes or particularizes, reminds us of what indeed there is no attempt to conceal—that he does not write from personal observation of all the objects mentioned, but satisfies himself with citations from others, and sometimes from authorities accredited indeed, but not always agreeing with each other. In reference to the sense and value of the range of art in the Roman "catacombs," it is difficult to strike the balance justly between such conflicting testimonies as De Rossi, Northcote, and Brownlow on one side, and on the other Maitland, Marriott, Parker. But highly important is it that that balance should be correctly adjusted. One may accept with unreserved reliance, and be glad to see so often cited in these pages, such authorities as Bottari, Agincourt, Piper, Martigny; but Perret's *Catacombes de Rome* may be objected to on account of the manifestly embellishing, and indeed almost idealizing process to which the olden and quaintly characteristic originals are subjected in the chromolithographic illustrations of that splendidly got-up work.

It is an inaccuracy, occurring on almost the first page of the volume before me, to rank the museum of the Capitol in Rome among those "containing monuments and remains of the early Christian ages." Some Christian epigraphs have lately been added to that gallery, and several others referring to the Christian emperors have long been placed there; but the fine art contents of the Capitoline sculpture gallery are exclusively classic and Pagan.

With regard to some of this author's statements and inferences I venture to differ from him.

Among Christian emblems the dove is mentioned in these pages as that of "Christian charity and peace." Rather, I believe, are those right who agree with the generally received explanation that doves (as also other birds of the gentle and lovely species) symbolize the freed and beatified soul—and are therefore so frequently introduced in sepulchral paintings or incised beside epitaphs on Christian tombs. An object sometimes seen in the paintings of the ancient cemeteries (or catacombs), the milk-pail, either in the hands of the Good Shepherd, or placed by itself upon a kind of altar or rock, with two sheep beside it, is more than "probably"—*certainly* (as I believe) to be understood as representing the Holy Eucharist.

The picture in the cemetery of S. Callixtus, in which we see a man of venerable aspect seated, with scroll in his hands, and a woman drawing water from a well, can hardly be meant (as here assumed) for "Christ and the woman of Samaria"—an explanation with which its grouping no way accords; and I may prefer the more satisfactory key to this mystical subject supplied by Northcote and Brownlow, who conclude that the male figure is some holy pastor, perhaps Pope Callixtus himself, and the woman an allegoric figure of the faithful drawing water from the well of life—the Truth of Evangelic Doctrine.

The head of the Saviour (finely characterized even in its present dim and imperfect state) on the ceiling of a chapel in the SS. Nereus and Achilleus cemetery seems to me of earlier date—the purity and simplicity of the conception being taken into account—than the "second half of the

fourth century." A still greater mistake is it, I believe, to assign to the "second half of the ninth century" the better preserved solemnly and benignly beautiful head of the Saviour in the cemetery of S. Pontianus. The contrast, remarkably manifest, between this finely conceived picture and the repulsively ascetic character of the mosaic compositions in Roman churches known to be of that date, the ninth century—a decline from higher models still more apparent in the second half of that century—is more than sufficient for the refutation of this theory. Comparing that head with the full-length figure of the Saviour in the finest Roman mosaic of the sixth century, at the SS. Cosmo and Damiano church on the Forum, we may be led to assign about the same date to both works—the mosaic and the fresco. I should alike claim earlier origin than the period of deep decline in art for the other memorable picture, the "Baptism of Christ," in the S. Pontianus cemetery; yet this also is assigned by Dr. Appell to the same period.

The date here assumed for the well-known Madonna picture in the S. Agnes cemetery—the eighth century—is questionable; but perhaps given only on authority which our author does not stop to question. From that picture the nimbus is absent; yet the holy monogram is placed on both sides of the Virgin Mother's head. Remembering the decrees of the Council of Ephesus, A.D. 431, and its formal decision that the title *θεοτόκος* should be bestowed on Mary, may we not suppose that this picture, one of the earliest known in which the Mother and Divine Child are presented as a devotional, not historical group, pertained to the numerous class of those produced and in demand, kept (it is known) in houses and churches as a token and symbol of orthodoxy soon after the dispersal of that Eastern Council? The figure of the blessed Mother would certainly have the nimbus in an eighth century painting; for that accessory appears, common to all saintly heads, from the century previous.

Differing even from such an authority as Aringhi (here cited) with respect to a group among the interesting reliefs in the sarcophagus of Junius Bassus, prefect of Rome (*ob.* 359) in the crypt below S. Peter's, I conclude that the subject is not "S. Peter's Denial of the Saviour," but the arrest of that apostle, who is here seen standing between two Jews; and in this, as in the many other presentments of the same subject in early Christian art, I believe the intention is to prefigure or symbolize the persecutions awaiting the Church—not (at least not evidently) from any such starting point, in the artist's conception, as the hierarchic supremacy of that apostle.

The account of the "S. Januarius Catacombs" at Naples, the last section of this volume, seems to me the most interesting, and the part which best meets a demand hitherto unsatisfied—at least by any work in our language. Having visited and explored to the fullest extent then possible those Neapolitan hypogaea, first in the year 1870, next in 1872, I came back into daylight from their far-extending corridors and oratories impressed with a sense of the value and significance of the art-works, epigraphs, &c., contained in them, and with increased surprise at the comparative neglect in which they have hitherto been left. A full report of works carried out in them within recent years is supplied by De Rossi in a *fasciculus* of his *Bullettino* of Christian archaeology (*Anno II.*, second series, No. 1).

Among the paintings seen in these hypogaea which Dr. Appell fails not to appreciate some are admirable, others quaint and curious. None seem to be of the very highest antiquity within this range of illustrations left by the early Church. Nothing leads us to infer the state of persecution as that of the Neapolitan Christianity, for whose

worship and sepulture these retreats have served. The most important epigraphs (there are some in Greek among the many in Latin) have been transferred to the National Museum. I find no mention in these pages of two painted figures beside a tomb, which struck me as among the best, in half-lengths, of S. Peter and S. Paul, the holy monogram under one, three small crosses above the other head, and between them a half-length of the lady here interred with the epitaph *Bitutia in pace*. Another, a life-size figure of a young man holding a cross (probably a deacon), is like a pleasing and faithful portrait, this being without any inscribed name. A lately discovered hall in these subterranean retreats has the appearance of having been used for Pagan interment, if not for worship—its paintings of a gaily decorative, no distinctly religious character.

In taking leave of Dr. Appell's work I can earnestly recommend it as a manual suited to awaken intelligent interest in the aggregate of monuments here considered, and to guide, whilst suggesting method for, the pursuit of careful studies directed along certain paths within an ample and richly fertile field.

C. I. HEMANS.

ALBERT VON ZAHN.

THE death, on the 16th instant, of Albert von Zahn at Marienbad is announced. But thirty-seven years of age and of slender build, von Zahn gave promise of a long and useful life. His loss is deeply regretted, not only by those who were personally acquainted with him, but also by those who were aware of the position which he held amongst critics and historians of art. As keeper of the museum at Leipzig he distinguished himself by contributions to periodical literature and an essay on Dürer's relation to the art of the Renaissance. His work on ornament was deservedly successful. Promoted to the office of keeper at Weimar, he superintended the transfer of the treasures of art in that duchy to the new museum, and wrote an interesting paper on the drawing of Fra Bartolommeo in the Grand Ducal archives. Promoted again in 1870 to the office of keeper of the royal collections at Dresden, he introduced a new and more liberal spirit into the administration of the gallery; and we owe it to him that a series of photographs has been made directly from the masterpieces of the Dresden Museum which equals, if it does not surpass, anything of the kind that has yet been done elsewhere. He was an indefatigable workman, editor of the *Jahrbücher für Kunstwissenschaft*, to which he contributed valuable articles, editor of Burckhardt's *Cicerone*, which has been translated and published in England. It will be remembered as a proof of his manliness and frankness that, after holding a decided opinion as to the originality of the Madonna assigned to Holbein in the Dresden Museum, he went over to the other side when that picture was confronted with its Darmstadt rival.

Born in Saxony, and connected by feeling as well as by position with the court of his native country, he refused in 1872 an offer made to him to take an appointment as privy councillor attached to the department of art in the ministry of public worship at Berlin. His place at Dresden will be filled up with very great difficulty.

J. A. CROWE.

NOTES ON ART.

The American papers state that the site is already chosen for the great International Exhibition at Philadelphia which is to astonish the world in 1876. The largest building ever yet devoted to a similar purpose will, say the journalists, be erected upon it. As it is feared that the custom-house duties may prevent many persons from exhibiting it has been resolved that no tax shall be levied on articles intended for exhibition unless they are sold in America.

The School of Art at Geneva established in 1869 in order to raise artistic taste as applied to the manufactures of the country has adopted a new and we should think a most encouraging mode of rewarding its most successful pupils. All those namely who have so distinguished themselves as to earn a

prize during the past year are to be sent under the conduct of one of the professors to visit the exhibition at Lyons and all the museums and collections of that town that may be of interest or advantage to them.

Such art tours as this can scarcely fail to be of great benefit to the youthful student by making him acquainted with other art manufactures besides those of his own country and school. We recommend this Geneva mode of award to the authorities at South Kensington.

A catalogue has been recently published in Paris of the engraved and lithographed works of R. P. Bonington, one of our English artists who strange to say has met with more appreciation in France than in England. The editor, M. Aglaüs Bouvenne, has done his work very thoroughly, and it is only to be wished that he had at the same time described and catalogued the painted works of this charming artist. A portrait of Bonington engraved by Delauney and the facsimile of a letter addressed by the painter in 1825 to his friend M. Colin increase the value of the little volume.

La Fédération Artistique is the title of a new artistic journal that has recently appeared in Brussels. M. Gustave Lagye seems to be one of the principal contributors. It is published every Thursday, and the subscription is 15 fr. for the year, so that it is considerably cheaper than the older Belgian journal *Le Beffroi*.

It is announced that the jury of the *Salon* of 1873 have awarded first class medals to MM. Louis Félix Merson and Luc-Olivier Merson for painting, to MM. André Allard and Jean Baptiste Baujault for sculpture, to MM. Édouard Corroyer and Louis Ernest Lheureux for architecture, and to M. Adrien Didier for engraving.

The *Chronique des Arts* reports a curious case that has recently been tried in Paris. A certain M. Aldema had given the late artist Adrien Dauzats a commission for four pictures the subjects of which were to be taken from the "Arabian Nights." The price of each picture was fixed at 2,000 fr., that is to say 1,000 payable on the sketch and the other 1,000 on the reception of the finished picture. The first of the four pictures was begun by Dauzats, and he received according to agreement the 1,000 fr. for the sketch, which represented Sindbad the Sailor; but before the work could be finished the artist died, and his brother and heir when the sketch was demanded of him by M. Aldema, who generously offered to pay the additional 1,000, refused it on the ground that his respect for the memory of an artist did not permit of his selling one of his unfinished works. The Tribunal has however decided that the heir could not refuse to deliver a work already sold, and if the purchaser was content it was not for him to dispute the state to which the picture had advanced. Besides it was found that the picture had already been publicly exhibited since the death of the artist, so that the alleged ground of "respect" was to say the least of it open to suspicion.

The mediæval collection at the British Museum is not large, and seldom, we imagine, attracts the attention of visitors; nevertheless there are many objects of interest in it, especially several ivory carvings and other articles of early English workmanship. Among the latter is a small silver gilt casket or shrine that was acquired by the Museum from the Goodrich Court Collection formerly in the possession of the well-known antiquaries Ducarel and Douce. The shrine is richly engraved with the arms of Margaret, second wife of Edward I., and her step-daughter Isabella of France, the betrothed wife of Prince Edward, afterwards Edward II. It is supposed that it was given by the former to the latter between 1303, the date of the betrothal, and 1307, the date of the death of Edward I.

New Publications.

- BONNEFON, D. *Les écrivains modernes de la France*. Neuchâtel: Sandoz.
 BUNSEN, Chr. C. J. *Les Basiliques chrétiennes de Rome*. Frankfurt-a-M.: Baer.
 DESNOIRESTERRES, G. *Voltaire et la Société française au xviii^e Siècle*. Voltaire aux Délices. Paris: Didier.

- DIEREN, B. *Die Meistersinger v. Nürnberg als Drama betrachtet*. Leipzig: Klein.
 DIEZEL, C. A. *Ungedruckte Briefe Göthe's*. Leipzig: Wartig.
 HELBIG, W. *Untersuchungen üb. die Campanische Wandmalerei*. Leipzig: Breitkopf und Härtel.
 HIPLER, Prof. Dr. F. *Die Biographen des Nicolaus Kopernicus*. Leipzig: Peter.
 KARSTEN, J. *Oliver Goldsmith. Ein Gesamtbild seines Lebens und seiner Werke*. Strassburg: Trübner.
 LANDSTEINER, K. *Hans Makart u. Robert Hamerling, Zwei Repräsentanten moderner Kunst*. Wien: Beck.
 LASPEYRES, P. *Die Bauwerke der Renaissance in Umbrien*. Berlin: Ernst und Korn.
 LOISE, F. *L'Allemagne dans sa littérature nationale depuis les origines jusqu'aux temps modernes*. Antwerp: Kornicker.
 LÜTTKE, M. *Aegyptens neue Zeit. Ein Beitrag zur Culturgeschichte des gegenwärtigen Jahrhunderts sowie zur Charakteristik des Orients und des Islam*. Leipzig: Brockhaus.
 MASSON, Prof. D. *Life of Milton and History of his Time*. Vol. III. Macmillan.
 MAZZINI, G. *Scritti editi e inediti*. Vol. II. Politica. Milano: Civelli.
 MOSCHELES, Mrs. *Life of Moscheles*. Hurst & Blackett.
 OESTERLEY, Dr. H. *Johannis de Alta Silva Dolopathos, sive de rege et septem sapientibus*. Strassburg: Trübner.
 SCHMIDT, L. *Macbeth. Eine poet. Shakespearestudie*. Oschatz: Oldecop.
 SCHURÉ, E. *Richard Wagner und das musikalische Drama*. Hamburg: Meissner.
 SPITTA, P. *Johann Sebastian Bach*. Leipzig: Breitkopf u. Härtel.
 VER HUELL, A. *Cornelis Troost en zijn werken*. Arnheim: Nijhoff & Zoon.
 VIOLET-LE-DUC, E. *Monographie de l'ancienne église abbatiale de Vézelay*. Paris: Détaille.
 VON FLUGI, A. *Die Volkslieder des Engadin*. Strassburg: Trübner.
 WOLF, A. *Lucas Geizkofler und seine Selbstbiographie: 1550-1620*. Wien: Braumüller.

Theology.

Introduction to the Science of Religion. By F. Max Müller, M.A. Longmans.

THE peculiar character of these lectures makes adequate criticism of them peculiarly difficult. There is discernible on every page the easy strength and graceful cunning of a hand that is a perfect master in its own craft. The felicities of expression and style and the lucidities of exposition that made the *Sanskrit Literature*, the *Lectures on Language*, and the *Chips* so pleasant to read, exercise their charm here. There is the same fine blending of scholarly and scientific accuracy with philosophic insight and poetic beauty of form. There is the same exuberance of fancy and abundance of illustrative matter, which often, indeed, becomes a superabundance, the illustration not infrequently running away with author and reader alike and becoming a sort of Moses' rod to the argument. But while these *Lectures* interest they can hardly be said to satisfy, or realise one's idea of what an *Introduction to the Science of Religion* by Professor Max Müller ought to be. He has done so much to lead inquiry and stimulate thought on this and related subjects that the minds he has quickened and directed instinctively expect him to do much more. But there is no evidence in these *Lectures* that his mind has grown with the growth of his science, and is prepared to collect and develop into system the suggestive germs that he has from time to time thrown out. There is little here that can be called new, that Professor Müller had not said, often much better, elsewhere. The lectures, too, are fragmentary, even considered as being no more than they claim to be; discuss many questions about which one cares very little, hint at, rather than discuss, graver questions about which one cares a great deal. The science of religion, like every new science, or what claims to be one, raises many new issues and demands the re-discussion under altered relations of many old principles, and

it is rather tantalizing to see such points indicated only to be neatly passed by. Perhaps, however, the fault may lie not so much with Professor Müller as with our expectations, and he may think it well, having introduced us to the science, to leave us to master its ultimate principles and bearings for ourselves.

These *Lectures* are, like all that Professor Müller writes on questions touching theology, remarkable for their tact. His skill in the *μαεωτική τέχνη* is so perfect that he has made the *μαεωσις* of his science almost painless to ancient prejudice. Had some other studies, which bear no harder on the old *Rechtgläubigkeit*, been as diplomatically introduced to English thought, there had been more of friendliness and mutual profit in the relations of critical scholarship and religion.

This volume is made up of four lectures on the Science of Religion, and two essays, one on False Analogies in Comparative Theology, another on the Philosophy of Mythology. In the lectures a great variety of subjects are either discussed or glanced at, from the beliefs of savages to the opinions of Mr. Matthew Arnold. The first lecture shows at once the possibility and difficulty of the science, states its divisions, defines its province and method, describes and illustrates the action of the tools with which it has to work. The second lecture sketches the materials that have to be mastered before the student of religion can proceed to construct its science, discusses and rejects various proposed classifications of the religions of mankind, such as the true and false, natural and revealed, national and individual, polytheistic, dualistic, and monotheistic. The third lecture starts with a preliminary discussion as to the relation of religion, nationality, and language, and then goes on to the author's own classification, which is the same as his classification of languages, for Asia and Europe, Turanian, Semitic, and Aryan, and argues that as we have proofs of an original unity of language in each of these families we have also proofs of an original unity of religion in each. The fourth lecture describes "the right spirit in which ancient religions ought to be studied and interpreted," and explains the author's theory as to how primitive man attained and expressed his idea of God, and how from this primitive faith the later religions were developed.

A categorical examination of these *Lectures* were needless, but a few salient points may be selected for notice.

Professor Müller holds a qualified degeneration theory as to the religions of man. The ancient African faith was much higher than the modern, and what of it has been preserved has a "not altogether faded reminiscence of a supreme God, the Father of the black as well as of the white man" (p. 119, cf. 165). Man started in his religious career from a comparatively high level. What his original faith was, how he reached and expressed it, and how it degenerated into a very material polytheism, are eloquently described (pp. 269 ff.). But there is nothing that can be called valid proof or sober argument advanced on behalf of this theory. There is no attempt to explain the facts or answer the speculations of Charles Darwin or Herbert Spencer, E. B. Tylor or Sir J. Lubbock. The discussion throughout is based on the author's peculiar linguistic and mythological doctrines, finds in them its illustrations, and is conducted in their interest. Now, I by no means undervalue or pronounce against these doctrines, but simply complain that so great a theory is raised on so narrow a basis, especially when the question has been so much debated of late and the other side has been so well defended and maintained by some of the greatest names in England. The question is fundamental, for as it is decided Professor Müller's theory as to the origin and growth of religion, not only in the Indo-European, but in the human, race will stand or fall.

But, again, there is the question as to the origin of our

religious ideas. It has two sides—a psychological and historical—the one falling under what Professor Müller terms theoretic theology, the other under comparative. The one inquires, Why did man begin to believe or worship? the other, What was the earliest form of the belief he held, or the worship he practised? The first question is in the lectures answered thus:—There is in man a "faculty which independent of, nay in spite of sense and reason, enables man to apprehend the Infinite under different names, and under varying disguises" (p. 17). Again, "there is clearly a place for a philosophical discipline that has to examine into the conditions of that faculty of man, co-ordinate with sense and reason, the faculty of perceiving the Infinite, which is at the root of all religions" (p. 18, see also p. 20). Now, it is strange that a phrase so vague as "faculty of apprehending the Infinite," with its action described in terms still more vague, should satisfy so great a master of language as Max Müller, and one, too, so deeply versed in German speculation from Kant to Hegel and Schelling, and therefore in the ambiguities of meaning and varieties of thought that can hide themselves in so large a phrase. Is it a simple or complex faculty? Is its action direct or indirect? does it reach its object by intuition or does it proceed by induction? To what extent and in what order does it call into exercise or stand rooted in the conscience, or the emotions, or the intellect, severally or collectively? In other words, does religion proceed from the dictates of the practical reason, a feeling of dependence, or an act of the intellect searching after a first and final cause? These points need to be defined to determine, not only how far and under what forms this faculty can be active in primitive as in civilized, in civilized as in primitive, man, but also what elements are necessary to constitute a religion, and what laws regulate its growth. The fears, dreams, and fancies out of which certain ethnologists derive religion may be the modes in which this faculty operates in the savage, while meditation or devotion may be its forms among civilized men. But what we need in order to understand the matter and bring it to an issue is, a psychological analysis and exposition of this "faculty of apprehending the Infinite."

The primitive religion which this faculty created is painted in very glowing colours. Man has a "feeling of incompleteness, of weakness, of dependence" which "we can as little explain as we can explain why the newborn child feels the craving of hunger and thirst." "He looks for a guide, for a friend; he wearies for some one on whom he can rest; he wants something like a father in heaven" (p. 270). So he wrestled with the idea of God within him "till he had conceived it, and brought it forth, and given it its name" (p. 273). "The brilliant sky was, no doubt, the most exalted, it was the only infinite and unchanging being that had received a name, and that could lend its name to that as yet unborn idea of the Infinite which disquieted the human mind" (p. 272). And so the name of the sky became the name of God. The man who first used it distinguished well enough between "the blue canopy above" and his God; "but when that name had to be used with the young and the aged, with silly children and doting grandmothers, it was impossible to preserve it from being misunderstood" (p. 273). The process downward is—the sky is regarded as the abode of God; then the double sense of the name forgotten, and "the visible canopy over our heads" implored and worshipped as God; and, lastly, "many things true of the visible sky would be told of its divine namesake," and so legends and mythology would arise. And so religion becomes "a sacred dialect of human speech" (p. 154), and its inevitable changes "the *dialectic growth and decay*, or if you like, *dialectic life of religion*" (p. 274).

Now, all this is very beautiful, but very unscientific and unreal. The "faculty of apprehending the Infinite" has become in the first place a faculty of creating myths. The process of creation and growth thus described, while admirably adapted to explain the rise and development of a solar mythology, is curiously insufficient to explain the evolution of the religious ideas embodied in the worships and politics of man. Religion is not so much made up of names as of acts; worship is as essential to it as speech. Man, too, is not quite so much the victim of language as this theory implies. If he had faculty enough to create names for objects of sense, he had as much as create names for those of thought. And as the need to find God and a name for Him came, according to Professor Müller, not so much from the perceptions of sense as the emotions or wants of the spirit, it seems certain that the subjective element would assert itself in the name even more than the objective. Then, the theory is of limited application, can, indeed, solve most of the riddles of Indo-European mythology, but is only in part applicable to the so-called Turanian religion of China, on the one hand, and totally inapplicable to the Semitic religions, on the other. In the one case, the process ceased before it was well begun; in the other, the Semitic mind framed for its deities names that show it had never passed through the experiences and stages Professor Müller describes, either as to the finding and naming of God, or as to the so identifying of Him and His attributes with physical objects as to generate a mythology. In short, the comparative theologian is here dominated by the Indo-European comparative philologist and mythologist, who errs simply by giving too wide an application to principles and methods which he has found of pre-eminent service within a narrower sphere of inquiry.

The classification of religions Professor Müller proposes is also open to criticism. It is the same as his classification of languages, and proceeds from his conception of the relation between language and religion. No doubt, it is within limits both correct and convenient. There is a genetic relationship, possibly between the several Turanian religions, certainly between those of the Semitic and Indo-European families respectively. There are, too, certain characteristics which distinguish the religions peculiar to the one family from those peculiar to the other. But, then, the great religions of the world cannot be so classified. Christianity can be described neither as a Semitic nor as an Aryan religion, because it contains elements which it owes to both races and to neither. Buddhism though Aryan in origin has long since passed over to men of another race, and Mahomedanism, though true on the whole to the Semitic spirit, owes much of its dominion to men of alien blood. The classification fails, too, at the other end of the scale, and, while leaving the religions of many savage peoples unclassified, either leaves isolated a worship so elaborate and cultured as that of ancient Egypt, or brings it into suspicious, not to say impossible, relationship with the rude Fetishisms of Africa (cf. 118-9, 164-6). Races so mix and religions with them, race religions become so universalized, that, while classification by race may be adopted provisionally, or while investigation remains at a given point, classification by character can alone be ultimately valid.

Of minor points and incidental allusions a few here and there are open to question. Such as the ingenious explanation of the story as to the creation of Eve from the rib of Adam (pp. 45-8), the religious character marriage has had from the very beginning of history (p. 153), and the relation between nationality and religion (pp. 145-52), which is expressed, perhaps, rather too absolutely. But it were needless to push criticism into details. Professor M. is often more

instructive and suggestive in his digressions than in his leading arguments, and there is no quality in him one admires more than his rare faculty of striking out unexpected parallels, and illuminating by a side light some obscure corner of an intricate and difficult subject. He has served, as perhaps no man now living in England has done, the cause of scientific philology, and has helped to create a new era for scientific theology. If the tendency to criticize is greater the spirit and capacity to admire are no less, than when he began to publish his theories as to language and his speculations as to the origin and growth of mythology and religion. And these few criticisms of his latest book cannot more appropriately close than with the hope, that, when next we meet him on the field he has so successfully cultivated and stimulated others to cultivate, it may be with a work entirely worthy of his great name.

A. M. FAIRBAIRN.

NOTICES OF NEW BOOKS.

Heyse and Tischendorf's edition of the Vulgate version of the Old Testament, with readings of the Codex Amiatinus.

"THE only MS. of the Latin translation of the Old Testament by Jerome which has not been corrupted, is at Florence, and a collation of it for me is being made by Dr. Heyse, which is to be completed by September 15." Thus wrote Bunsen to a friend in 1857 (*Life*, vol. ii., p. 431), and in 1873 this much needed work is given to the public. The text in the body of the page is taken from the Clementine edition of 1592 and that of Vercellone, variants of the Codex Amiatinus being placed at the foot, with occasional references to the readings of the Hebrew and the other ancient versions. Dr. Heyse being prevented by ill-health from seeing the latter part of the work through the press, this friendly office was undertaken by Professor von Tischendorf. Latinists and students of the Old Testament have at last a text of the translation of Jerome which can be used with some confidence for critical purposes. The only regret now left us is that the text of the Old Testament has not been given in full, as was so excellently done by von Tischendorf in the case of the New.

Messe und Pascha. Von Gustav Bickell. Mainz: Kirchheim.

DR. BICKELL, whose edition of the writings of S. Isaac of Antioch we mentioned in a recent number, has set himself in the present work to prove that the Roman liturgy of the Mass was in all essential points fixed and determined by Christ and the Apostles. He compares the liturgy of the Apostolical Constitutions with the corresponding Jewish ritual, and arrives at the conclusion that the former is derived from the Passion-service expanded and transformed by our Lord. Whatever be their opinion of this result, all students will appreciate the evidence so carefully brought together of Jewish influence on Christian forms and ceremonies.

Le Concile de Nicée d'après les textes coptes. Par E. Révillout. Paris: Lafitte.

AN extract with separate pagination from the February-March number of the *Journal Asiatique*. Gelasius long ago told us that the Acts of Nicaea consisted of three parts—1, the dogmatic, which contained the "symbol," the anathemas, &c.; 2, the disciplinary, summed up in the canons; and 3, the moral, which contained rules for leading the Christian life. M. E. Révillout has now demonstrated the accuracy of this statement. He has published two long fragments from MSS. in the Turin collection, one of which relates to the dogmatic part of the Nicene Acts, while the other contains gnomes, or maxims, written in an elevated, parallelistic style, and belonging apparently to the third of the divisions mentioned by Gelasius. Both frag-

ments are edited in the Coptic text with a French translation. They are said to have come from the convent at Alexandria known as "the place, or sanctuary, of St. John the Baptist."

Ueber den Ursprung und den ältesten Gebrauch des Christen-namens. Von Dr. R. A. Lipsius. Jena.

THIS is an academical programme presented by Dr. Lipsius in the name of the theological faculty of Jena to the venerable Dr. Hase, senior professor of the faculty, who celebrates this year the jubilee of his doctor's degree. The author's object is to show that the name *Christiani* originated among the heathen population of Asia Minor in one of the latter decades of the first century. It is possible that this took place as early as the close of the reign of Nero, though it may not have been till the destruction of Jerusalem and its temple, which put an end once for all to the original confusion between the followers of Christ and the professors of Judaism. The mention of the name of Christian in the Acts of the Apostles is shown, on this hypothesis, to involve an anachronism. It is true that it is first traceable in Asia Minor, and was possibly invented, as the writer in the Acts says, in Antioch, but its absence from the other books of the New Testament, except the first epistle of Peter (1 Peter iv. 16), which is of doubtful genuineness, shows that it was not in use as early as the time of S. Paul. This view is confirmed by an examination of the Jewish-Christian literature and the writings of the Apologists. The name first occurs in the works of Latin authors (Tac. *Ann.* xx. 44, Sueton. *Nero* 16, Plin. *Epp.* 96 and 97). Tacitus and Suetonius speak of it as in use at Rome in the reign of Nero, but this may possibly be an anachronism. Their evidence is beyond dispute only for their own period, i.e. from A.D. 116 to 120. The passages in Pliny show that there was as yet no settled judicial policy with reference to Christianity at the court of Rome. This circumstance, and the tendency of the Romans to confound Christianity with Judaism, are against the view that the appellation arose at Rome in the reign of Nero. The form of the word Christian points on the whole to Asia Minor. A Roman origin is not absolutely impossible, since the imperial rule was marked by a growing irregularity in the formation of names. To be good Latin, it should be *Christinus* or *Christanus*. But the probability is that *Christiani* belongs to that very large class of names in *ἡνός, ανός, and ιανός*, which the grammarians describe as *τύπος Ἀσιανός*. It is remarkable that the only passage in the New Testament where the name occurs is in an epistle addressed to the strangers scattered in Pontus, Galatia, Cappadocia, Asia, and Bithynia, the very regions where, according to the official report of the proconsul of Bithynia, the delation of the Christians was in full bloom. In a note on p. 7 Dr. Lipsius retracts his assertion of the genuineness of the three letters of Ignatius in the Syriac text. He still maintains them to be older than the shorter Greek text, but denies that any part of the text in any recension can be the work of Ignatius of Antioch.

A Comparative View of the Doctrines and Confessions of the various Communities of Christendom, with Illustrations from their original Standards. By Dr. G. B. Winer. Edited from the last edition, with an Introduction, by Rev. W. B. Pope. Edinburgh: T. and T. Clark.

THE comparative study of confessions of faith forms a recognised branch of the theological curriculum in Germany, and, as Mr. Pope shows at length in his thoughtful though ultra-conservative introduction, is well deserving of more attention in England. The most conscientious and dispassionate guide to the subject is probably the handbook now translated. The author, as Mr. Pope well observes, "still stands alone in his three characteristics: first, that of exhibiting all the standards of the Christian world . . . secondly, that of

giving the very words of the standards themselves in apt juxtaposition, and thirdly, that of abstinence from polemical dissertation or harmonizing" (Introd. p. xxix). There are however some obvious objections to Winer's mode of treatment. It tends to confirm the student in the false belief that the history of dogma is a mass of dry unconnected details. It leaves out of sight the fact that heterogeneous elements often if not always co-exist in the same religion. And it ignores the capacity of assimilating new truths possessed by all healthy religious communities. It is true that Winer has made some slight provision for the study of the respective confessions in their entirety in the comparative tables placed in the appendix. Mr. Pope speaks of "the tact with which a multitude of harmonious and discordant elements are articulated into one homogeneous structure" (Introd. p. xxxix). But these tables merely suggest the existence of a hidden unity in the midst of diversities; they do not show how this unity is produced. If the student is to use them to any profit, he must enter the thorny region of controversy, which his guide so studiously avoids. He must give up the dream of the exclusive possession of religious truth, and learn to estimate his own and the other confessions on well-defined critical principles.

T. K. CHEYNE.

Geschichte Jesu übersichtlich erzählt. Von Dr. Theodor Keim. Zürich: Orell, Füssli und Co.

DR. KEIM has shown his astonishing activity by bringing out a popular or condensed edition of his larger History of Jesus. He has carried out this new task with characteristic thoroughness and vigour. The book has not been mechanically abridged, but re-written from beginning to end. On a somewhat cursory examination we do not find that the earlier positions of the writer have been materially altered. His views respecting the composition of the Synoptics, the Fourth Gospel, the details and development of the history, the date and circumstances of the Crucifixion, and the Resurrection remain very much as they were. Only on the first and last of these points Dr. Keim seems to be rather more conscious that his position is temporary and provisional. The elaborate preliminary chapters of the earlier book have been much curtailed, and the attention is concentrated rather more upon the dynasty of the Herods—for the history of which Dr. Keim is now acknowledged as the highest authority. The appearance of the work in a double form gives it a distinct advantage over all others of the kind; and we gladly admit that some of the objections brought in this journal to the original edition have now altogether lost their point.

W. SANDAY.

NOTES ON THE HEBREW TEXT OF THE PSALMS.

1. Ps. lxxv. 6 (5) כִּנְחֹם קִלְכָּרְאֵי יָם

יָם יָם

The two last words are difficult. The translation of the authorized version—"and of them that are afar off upon the sea," is obviously incorrect. Some take יָם for a noun, for which there is no authority; others, assuming it to be here, as everywhere else, an adjective, connect it, not with יָם but with קִלְכָּרְאֵי, and translate, "The confidence of all the distant ends of the earth and sea," thus destroying the rhythm of the verse, and turning poetry into prose. The Syriac version suggests another mode of removing the difficulty, viz., the substitution of יָם for יָם. This would give,

כִּנְחֹם קִלְכָּרְאֵי יָם

יָם יָם

The confidence of all the ends of the earth,
Of the nations afar.

is found Joel iv. 8 (iii. 8). And the following passages may be compared, in which 'the nations' and 'the ends of the earth' are found in parallel clauses, viz., Ps. ii. 8; xxii. 28 (27); Is. xlix. 6; Jer. xvi. 19; xxv. 31.

2. Ps. lxix. 9 (8):
 מִן־רֵיחַ יְהוָה לְאָדָם
 וְנִכְרִי לְבָנֵי אִמִּי

is explained as a Hophal participle: but the root *ו* is not elsewhere found either in Hiphil or Hophal. I think it, therefore, extremely probable that the original reading was *ו*. Compare Job xix. 15, and the numerous passages in which *ו* and *נִכְרִי* are found in parallel clauses. The text would, then, stand thus:

כִּי־וְרֵיחַ יְהוָה
 וְנִכְרִי לְבָנֵי אִמִּי

I am as a stranger to my brethren,
 An alien to my mother's sons.

3. There are several passages in which it is unquestionable that *ו* has been substituted for *ו*, the two letters *ז* and *ח*, in some of the forms of the Semitic writing, being not unlike. Thus, in Ps. cxliii. 10, there can be little doubt that those MSS. are correct which read *וְיִנְחֵנִי בְּאַרְצוֹ כִּישׁוֹר*. "Thy good spirit will lead me in the path of uprightness," instead of the received text *וְיִנְחֵנִי בְּאַרְצוֹ כִּישׁוֹר*, "into the land of uprightness." Comp. Ps. xxvii. 11.

But this is not the only passage in which *ו* appears where we should expect *ו*.

(1) In Ps. lxvii. 5 (4), the present text is *וְיִשְׁפֹּט עַמִּים כִּישׁוֹר*
 וְיִשְׁפֹּט עַמִּים כִּישׁוֹר

which is translated in the A. V., "For thou shalt judge the people righteously, and govern the nations upon earth." But *ו* does not mean 'govern,' but 'guide' or 'lead' (as it is everywhere else rendered in the A. V.); and this at once points to the substitution of *ו* for the meaningless *ו*. The passage would then stand

כִּי־תִשְׁפֹּט עַמִּים כִּישׁוֹר
 וְיִשְׁפֹּט עַמִּים כִּישׁוֹר

For thou wilt judge the peoples righteously,
 And guide the nations in the way.

Comp. Ps. xxv. 8, 9, "Therefore will he teach sinners in the way;" and Prov. xxiii. 19, "Hear thou, my son, and be wise, and guide thine heart in the way."

(2) Still less doubt is there that the same substitution should be made in Ps. cxvi. 9: *וְיִנְחֵנִי לְפָנֵי יְהוָה*
 וְיִנְחֵנִי לְפָנֵי יְהוָה

"I will walk before the Lord in the lands (not *land*, as in A. V.,) of the living." For this we should clearly read:

וְיִנְחֵנִי לְפָנֵי יְהוָה
 וְיִנְחֵנִי לְפָנֵי יְהוָה

"I will walk before the Lord in the paths of life." Comp. Ps. xvi. 11. Prov. x. 17; xv. 25.

4. Ps. lxxi. 7: *וְיִנְחֵנִי לְפָנֵי יְהוָה*
 וְיִנְחֵנִי לְפָנֵי יְהוָה

I am as a wonder to many;
 But thou art my strong refuge.

What are we to understand by *ו* 'wonder,' in this connection? Some think the Psalmist describes himself as a marvel of divine grace, others, of divine judgment; but there is no evidence that the term, when applied to persons, is ever used in either sense. Compare Is. viii. 18; xx. 3; Ezek. xii. 6, 11; xxiv. 24, 27; Zach. iii. 8, the only passages in which it is so applied. Besides, with the present text, it is not easy to account for the insertion of the particle of comparison. Why *ו*, and not simply *ו*? It is possible *ו* may have stood in the original text, and not *ו*; this would well correspond with v. 20, "Thou . . . shalt quicken me again, and shalt bring me up again from the depths of the earth;" and is in some measure confirmed by comparison of Ps. xxxi. 13, 14 (12, 13), "I am forgotten, as a dead man (*ו*) . . . I have heard the slander of many, fear on every side,

while they took counsel together against me, they devised to take away my life." So it may have been here:

כִּי־וְיִנְחֵנִי לְפָנֵי יְהוָה
 וְיִנְחֵנִי לְפָנֵי יְהוָה

I have been to many as one dead,
 But thou art my strong refuge.

DUNCAN H. WEIR.

Contents of the Journals.

Theologisches Literaturblatt (Bonn).—The Nos. from February to June contain valuable articles on history, philosophy, and general literature, treated from a liberal Catholic point of view. Among the works of this class reviewed are Strauss' *The Old Faith and the New*, the same author's *Voltaire*, Crowe and Cavalcasse's *History of Italian Painting*, the Letters of Frederic the Pious, Lotze's *Mikrokosmos*, and the Basel Chronicles. Works of Catholic theology receive their fair share of attention, though Protestant divinity is not altogether neglected. The last No. contains a short notice of vol. 2 of the *Speaker's Commentary*, which is however entirely descriptive. We doubt whether Dr. Reusch can be in earnest when he remarks that Bishop Hervey does not emend the text of the books of Samuel to the extent recommended by Wellhausen in his critical essay. The fact is that the Bishop regards the Masoretic text as on the whole sound, in spite of the manifold deviations of the Septuagint.

New Publications.

ANGER, R. Geschichte der messianischen Idee. Berlin: Henschel.
 BIBLIA Sacra Latina Veteris Testamenti. Vulgata lectionem ex editione Clementinâ repetitam testimonium comitatur codicis Amiatini. Leipzig: Brockhaus.
 BÜDINGER, Max. Egyptische Einwirkungen auf hebräische Culte. [Extracted from Reports of the Akademie d. Wissenschaften.] Wien. Gerold's Sohn.
 COLENSO, J. W. Lectures on the Pentateuch and the Moabite Stone. Longmans.
 ELZAS, A. The Minor Prophets, translated from the Hebrew Text. Vol. I. Trübner.
 EWALD, H. Die Lehre der Bibel von Gott. 2 Bd. 1 Hlfte. Leipzig: Vogel.
 KEIL, C. F. Biblical Commentary on Ezra, Nehemiah, and Esther. Transl. by S. Taylor. Edinburgh: T. and T. Clark.
 KEIM, Th. The History of Jesus of Nazara. Vol. I. Transl. from the German. Williams and Norgate.
 RENAN, Ernest. L'Antéchrist. Paris: Michel L'vy.
 RULE, W. H. and ANDERSON, J. C. Biblical Monuments. Hamilton, Adams, and Co.
 TRISTRAM, H. B. The Land of Moab. London: Murray.

Science.

On the Chlorophyll Colouring-Matters. [Zur Kenntniss der Chlorophyllfarbstoffe und ihrer Verwandten.] By Dr. Gregor Kraus. Stuttgart. 1872.

THE object of the author in writing this work was to draw the attention of his countrymen to the value of the spectrum microscope in studying certain branches of botany, and to illustrate its use by showing what may be learned by the investigation of the spectra of some of the coloured substances found in the leaves and flowers of plants. It appears that the instrument is very little known in Germany, and the author expresses his regret that it has not yet been appreciated out of England. Having described the Sorby-Browning spectrum eye-piece and other instruments used, and, as I think, very truly pointed out the importance of having a very bright spectrum, without great dispersion, he proceeds to the consideration of the colouring-matters of plants. One great value of the work consists in the very complete account of the observations of previous experimenters, many of which however are of very little more than historical interest; since the methods employed were usually very unsuitable, and the materials used so impure that the results cannot be referred with confidence to any one particular substance. The description of the spectra of

the different colouring-matters, and the lithographed illustrations, are in my opinion very good and accurate; but I am compelled to differ from the author in many of the conclusions at which he has arrived.

In studying this subject I have been more and more convinced of the importance of distinguishing the various constituents of complicated mixtures, and my own knowledge has to a great extent advanced in the same proportion as I have been able to discover methods which could be employed with advantage in deciding whether a coloured solution was or was not of compound nature, and in determining the character of the different constituents. I have therefore paid very particular attention to this question, and have been led to a somewhat peculiar use of bisulphide of carbon, alcohol, and water, in various proportions, in order to separate the constituents more or less perfectly, and also to the employment of what I have named *photochemical analysis*, being the use of light as a re-agent to decompose some of the coloured constituents and leave others, when it is difficult, or even impossible, to separate them by chemical methods. Anyone who has not tried them would scarcely believe what can be done by the use of such simple means. The application of these methods, and the comparison of the coloured constituents of all the leading classes of plants, especially those of fungi, lichens, and algae, growing in various conditions, have led me to find that there is a considerable number of what may be called fundamental colouring-matters, which are absent or occur in very different proportions in different kinds of plants, and also in the same kind, when growing in different circumstances, besides a still larger number of apparently unessential coloured substances, which may be present or absent without materially interfering with the healthy growth of the plant. I have given a general account of these researches in a paper recently read at the Royal Society, on "Comparative Vegetable Chromatology," and need not describe them now; but the results derived from these methods lead me to differ from the author in some important and fundamental particulars. In some cases preparations which he looks upon as different substances are in my opinion the same, only in one instance mixed with one, and in another instance with another colouring-matter, whilst in other cases he attributes certain variable spectra to the same single substance, modified by some unknown, and, as I believe, altogether imaginary, cause, whereas it can easily be shown that all these variations are due to variable mixtures of substances well known in an approximately pure state, having perfectly definite and constant properties. For example, he describes and figures the spectra of the blue-green colouring-matters from *Deutzia scabra*, and from *Oscillatoria*, and shows that they differ in constant and important particulars. He hence concludes that they are two distinct substances without any simple and definite connexion, whereas by employing the methods I have alluded to it may be most conclusively proved that what I have called blue chlorophyll is the principal constituent of both, but that it is mixed in the one case with a substance found in all green leaves, though not in *Oscillatoriae*, and in the other case with another, occurring in large quantity in *Oscillatoriae* grown in bright light, though in relatively very small quantity in green leaves, and even in *Oscillatoriae* when grown in a very shady place. It is chiefly in the case of the colouring-matters belonging to what I have called the xanthophyll group that the author attributes the variation in the spectra to some unknown cause, and I look upon it as very important to be able to show that this variation is simply due to a variable mixture of two or more substances, for it would lead to loose and inaccurate observations if we were to

suppose that the optical characters of any separate compound could vary when dissolved in the same liquid. On the contrary, now that it can be shown by various methods that the solutions giving these variable spectra are mixtures of substances that can often be separated, and that the results can be easily imitated by artificial mixtures, there is no kind of reason for supposing that in like circumstances the optical characters of any of the separate constituents are variable. Not only is it important to establish this fact, but by distinguishing the different constituents, and determining their relative quantity in different cases, we have a perfectly simple and intelligible method of comparison, which otherwise would not be the case. The value of such principles in studying comparative vegetable chromatology will be seen at once, since it enables us to understand the exact connexion and difference between the coloured constituents of different classes of plants. With such exceptions as these, which are to be attributed in great measure to the application of new methods of research, I must express my high opinion of the merits of the work, and I trust that its publication will be the means of leading to the more complete and accurate study of a branch of research which will probably yield most valuable results; only, as I believe, these will be derived, not from the discovery of rare and exceptional colouring-matters, but from the careful and accurate qualitative and comparative quantitative analysis of complicated mixtures of the most common and fundamental, which may not have attractive properties, but yet probably play an important part in the economy of particular classes of plants. When we thus study the subject, and do not ignore what might be looked upon as insignificant details, it seems possible to draw a number of important conclusions, and to examine some of the most fundamental questions of biology from a new and independent point of view.

H. C. SORBY.

Notes on Scientific Work.

Geology.

The Ancient Glaciers of the Sierras.—Prof. Le Conte, after having lived for four or five weeks in camp on the Sierras of California, has published a description (*Amer. Jour. of Science and Art*, No. 29, 1873, p. 325) of the existing evidences of former extensive glacial action in that region. The district examined comprises the Yosemite or Merced, Tuolumne, Lake, and American River valleys; and Bloody and Carson cañons, with their tributaries. In all distinct traces of glacial scoring and polishing are visible though much obliterated in many places by the disintegration of the coarser and more friable granite rocks; numerous moraines were likewise recognized. The lower part of Little Yosemite Valley is strewn with erratics of a coarse porphyritic granite, the felspar crystals of which are often four or five inches in length, and stand out from the weathered surfaces so as to resemble a coarse conglomerate or breccia. These were traced up Felspar Valley to their parent rock the Cathedral Peak and other similar peaks in the vicinity. In the upper part of the track of the Tenaya, one of the tributaries of the Yosemite glacier, which emerged from the Cathedral Peak, acres of glaciated surfaces are to be found of so smooth a surface that it is difficult to ride over them; rock basins are also abundant. Owing to the porphyritic character of the granite, the faces present the appearance of polished brecciated marble. Above Lake Tenaya appears a mass of granite 800 feet in height and more than half a mile long, polished on every side as well as over its top, where it is rounded like the carapace of a tortoise. The Tuolumne glacier from its source in Mt. Lyell to the mouth of Hetchy-hetchy Valley must have been at least forty miles in length, and have had many tributaries, all of which met above Soda Springs. Near this point and in the track of the glacier, stand two masses of rock from 500 to 800 feet high, which are smoothed and rounded on every side and on the summit, being perfect examples of *moutonnée* forms on a large scale. The main branch of this great glacier still exists, not as a true glacier, but as a mass of snow and névé, still it exhibits differential motion and has a well marked terminal moraine, about twenty feet high, fifty feet wide at the base, and about one mile long. The movement was determined by driving stakes along a line across the snow; when examined after forty-six days they had moved as follows:—No. 1, 11 in.; No. 2, 18 in.;

No. 3, 34 in.; and No. 4, which was near the middle, 47 in. The frozen mass occupies a sheltered cove in the vast amphitheatre formed by Mt. Lyell (13,300 feet high), Mt. McClure and other unnamed peaks, and is about one mile in length and half a mile wide. Among the highest peaks of the Sierras are many more similar remnants of the ancient glaciers. Bloody Cañon exhibits admirable examples of the two kinds of glacial lakes, those contained in rock basins scooped out by glacial erosion, and those accumulated behind terminal moraines; the latter graduate insensibly into marshes and meadows at the lower levels. From the top of Mt. Dana more than fifty of these lakes and marshes can be counted. The scorings in Carson Cañon are those of a glacier fifteen miles long and three to four miles wide, which descended in a southerly direction along Hope Valley and then turned at nearly right angles into the Carson Cañon. Prof. Le Conte believes that the deep narrow cañons of the Sierras have been "sawn out" by the action of glaciers, and that the coarse "perpendicular cleavage" structure of some of the granite has determined "the peculiar verticality of the walls." He points out that the erosion in this region has been enormous, for in addition to the whole thickness of the slates which, as is shown by various still existing patches, must once have covered the whole of the granite, there is reason to believe that several thousand feet of granite have also been removed. The highest peaks are composed of slate, the higher valleys of granite; lower down, the Cathedral and other peaks and ridges are of very coarse felspathic granite. The erosion here has been through at least 2,000 feet down to the harder and more siliceous granite. Still lower, about Yosemite, only this harder granite exists, the slate and the softer granite having been entirely removed.

The Silurian Formation on the Dniester.—In a letter to Prof. Geinitz (*Neues Jahrb. für Min.*, 1873, Part 2, p. 169) F. Schmidt gives the results of an examination of the fossils and their *gisement* in the Silurian which occurs on the banks of the Dniester in Podolia and Galicia, undertaken at the request of the Imperial Mineralogical Society of St. Petersburg. He finds the beds identical with those of the Ludlow group in Oesel and Gothland, and regards them as a continuation of Baltic Silurian. In Podolia, in the vicinity of Kamenetz, the prevailing rock is coral limestone which encloses *Strematopora*, *Heliolites*, and *Labechia conferta*, as well as *Euomphalus alatus*, *Lucina prisca*, and *Pentamerus galeatus*, all being characteristic species. This is accompanied by thin-bedded calc-marl, both underlying a clay-bed containing no fossils. The deposits in Galicia are characterized by thin beds of lime-stone interlaminated with slaty clay and abounding in *Tentaculites ornatus* and *tenuis*, and *Leperditia baltica*; *Orthonota rotunda* and *Pterinea retroflexa* are likewise present. Individual shields of *Pteraspis* are not rare. The lower division of the Upper Silurian is but sparsely developed on the Dniester, only two localities being known which can with certainty be identified with the Wenlock group. They are, the grey marl near Studenitz and Kitaigorod in Podolia, bearing the characteristic Wenlock shells *Spirifer radiatus*, *Orthis elegantula*, *Leptaena transversalis* and others; and a greenish-grey marl which extends from Mot-Biskupje to Borsczow in the Niklaw valley, which contains, in addition to the foregoing, *Orthis hybrida*, *Strophomena pecten* and *filosa* and a few new forms.

Physiology.

Physiology of the Brain.—At the recent congress of German naturalists at Berlin M. Flechsig gave an account of some investigations he had made on the development of the white substance of the central nervous system of the human brain. The observations of M. Flechsig were made on foetuses varying in age from 4½ months to 5, 6, and 7 months, on one foetus of 7½ months, on one which had only lived one day, and on others which had lived for some time. He finds that the process of development in the brain follows a definite type for a different period both of intra and of extra uterine life. Certain well defined tracts turn white whilst others retain their grey colour. Extra uterine life exerts a powerful influence on the development of the white substance of the brain which before birth possesses only a whitish colour. The optic thalami do not become white until the third day after birth. The phenomena thus presented are identical on both sides of the brain.

New Mode of Estimating the Absolute Quantity of Blood contained in the Body.—It has long been known that in the process of bleeding to death, though several vessels may have been simultaneously opened, a relatively large proportion of blood remains in the smaller vessels of various organs. Welcker proposed to estimate this quantity by washing out the vessels thoroughly with pure water, and comparing the colour of the washings with certain standard test-solutions previously prepared by the dilution of known quantities of blood with definite quantities of water. This plan has been adopted by Heidenhain, Bischoff, Panum, Gescheidten, Ranke, and Spiegelberg. Brozeit has recently made use of another method suggested by v. Wittich; he obtains the Haematin from a definite quantity of the blood by means of ether and hydrochloric acid, and this constitutes a standard. The quantity obtained from a measured quantity of the washing is then

ascertained, and the amount of blood in the washings is then easily ascertained. Steinberg having noticed that some difficulty exists in estimating the fine shades of colour in Welcker's colorimetric method, dilutes a definite quantity of the natural blood of the animal till a green colour appears in the spectrum. The washings are diluted till the same band is developed and data are thus obtained for the calculation of the amount of blood contained in the washings. Carrying out this plan Steinberg finds that the total quantity of blood in the rabbit is $\frac{1}{11}$ to $\frac{1}{12}$ of the weight of its body. In the guinea-pig the weight of the blood to that of the entire body is as 1 : 12.0—12.3; in an adult dog as 1 : 11.2—12.5; in a puppy as 1 : 16.2—17.8; in an adult cat as 1 : 10.4—11.9; in a kitten as 1 : 17.3—18.4; and in an adult fasting cat as 1 : 17.8.

The Source of the Urea of the Animal Body.—In the *Zeitschrift für Biologie* Dr. O. Schultzen and M. Nencki discuss the question of the probable nature of the secondary compounds which immediately precede the production of urea in the animal economy (see also the *Academy*, iii., 331). It has long been known that albuminous substances, if acted on by acids or alkalies or by the pancreatic juice, yield leucine, tyrosine glyccoll, &c. Dr. Schultzen and M. Nencki hold that these are the preliminary stages of urea. To reduce it however as far as practicable to certainty they diminished the food of a small dog till a minimum of urea was eliminated. Then on certain days a definite quantity of one or other of the above substances was administered, and the amount of urea eliminated on this and the following days was carefully estimated by the method of Bunsen. It was found that acetamide caused very slight increase in the amount of urea. Ten grammes of glyccoll caused an increase of nine grammes of urea; leucine acted like glyccoll; tyrosine on the other hand caused no material increase, but was found both in the faeces and urine. The authors conclude that the amido-acids form the urea, but not by a simple process of disintegration, since in one molecule of urea there are two atoms of nitrogen, while in one atom of amido-acid there is but one atom of that element. They believe that albuminous substances split up into amido-acids and non-azotised compounds. The amido-acids form urea and the non-azotised bodies undergo further oxidation into carbonic acid and water.

Botany.

The Gonidia of Lichens.—In the *Annales des Sciences Naturelles* (Botanique), vol. 17, M. E. Bornet records a series of observations on the gonidia of lichens, made on species belonging to sixty different genera. The conclusion to which his examination has led the writer is that the relations of the hypha to the gonidia of lichens are of such a nature that they exclude the possibility of one of these organs being produced from the other; the theory of parasitism being the only one which can give a satisfactory explanation of these relations. He believes that in every known instance the gonidia of lichens can be produced upon a species of alga.

The winter propagation of Duckweed.—In the *American Naturalist* for May, Prof. T. D. Biscoe gives an interesting account, illustrated by drawings, of microscopic work undertaken with a view of testing the mode by which the minute white "winter fronds" of *Lemna pteryrrhaea* develop into the well-known green summer flowering and rooting fronds. He finds that the rudiments of both leaf-buds and roots are to be detected, by careful dissection, in the apparently dead winter fronds.

The Fertilisation of Cereals.—Mr. A. S. Wilson contributes to the *Gardeners' Chronicle* of May 24th some additional notes on this important and much controverted subject, differing in some respects from those already recorded. He agrees with Delpino in believing that insects have no share in the fertilisation of cereals, and, like that observer, does not think it correct to maintain that the wind is the agent in the same sense that this is asserted of dioecious plants. The essential agency is probably the sudden extension of the filaments causing a few grains of pollen to be emptied out of the anthers before they are entirely ejected from the flower. In the case of rye this extension of the filaments takes place with extraordinary rapidity. Before flowering the filaments will be found to measure about $\frac{1}{16}$ of an inch in length; in the course of five minutes or less from the instant the pales begin to open the filaments will, in many cases, have extended to $\frac{1}{8}$ of an inch, the whole of the pollen having fallen out, with the exception of a few grains which probably cause the fertilisation. Mr. Wilson questions the accuracy of Hildebrand's statement (see *Academy*, vol. iv. p. 94) that the majority of the flowers of barley never open, at all events in Scotland; as also another statement by the same writer that the flowers of the oat do not open in wet weather. Although clouds of pollen may be seen passing over a field of wheat, rye, barley, or oats on a windy day, Mr. Wilson does not consider it by any means proved that cross-fertilisation takes place in this manner.

Development of the Ovule and Fertilisation in Primulaceae.—Prof. P. M. Duncan read a very important paper on this subject at the meeting of the Linnean Society held June 19th. He controverts the published views of Duchartre that the "free central" placenta of Primulaceae is formed perfectly free within the cavity of the ovary and never at any time has any connection with the ovarian wall, and finds

on the contrary that the placenta and ovarian wall separate from one another by a process of differentiation. The ovules are of very simple structure, consisting of nothing but a single integument covering the embryo-sac; there is no inner integument and no nucleus. The lower part of the style consists of dense tissue absolutely impermeable to the pollen-tubes; and even if these were able to enter the ovary in this way they would be quite unable to reach the micropyle of the ovule, from its close contiguity to the placenta. Prof. Duncan has traced the course of the pollen-tubes from the base of the style through the loose tissue of the placenta itself, from which they emerge in the immediate neighbourhood of the micropyles of the ovules, which they then enter.

New Publications.

- BAILLON, H. Histoire des plantes. Monographie des Ochnacées et des Rutacées. Paris: Martinet.
- BARTHÈS, M. Glossaire botanique languedocien, français, latin, de l'arrondissement de Saint-Pons (Hérault). Montpellier: Ricateau.
- BAUSCHINGER, J. Mittheilungen aus dem mechanisch-technischen Laboratorium der polytech. Schule in München. 1^{er} Heft. München: Ackermann.
- BECK, O. Die Wurzellaus des Rebstocks. Trier: Linz.
- BEICHE, E. Vollständiger Blütenkalender der deutschen Phanerogamen-Flora. Hannover: Huhn.
- BONSSINESQ, J. Recherches sur les principes de la mécanique, sur la construction moléculaire des corps et sur une nouvelle théorie des gaz parfaits. Montpellier: Boehm.
- CHEVALLIER, E. Notice sur les insectes utiles de la Savoie. Annecy: Perrissin.
- CLAPARÈDE, E. Recherches sur la structure des annélides sédentaires. Basel: Georg.
- COHNHEIM, J. Neue Untersuchungen ueber die Entzündung. Berlin: Hirschwald.
- COTTARD, F. De la valeur de la triméthylamine dans le traitement du rhumatisme articulaire. Paris: Parent.
- DE GAYFFIER, E. Herbar forestier de la France. Reproduction par la photographie, d'après nature et de grandeur naturelle, de toutes les plantes ligneuses que croissent spontanément en forêt. Paris: Rothschild.
- DE GIRARDS, J. Les matières glucogènes et les sucres au point de vue chimique et physiologique. Montpellier: Boehm.
- DEFORTRIE, E. Étude sur les restes fossiles de siléniens du genre Halitherium dans le bassin de la Garonne. Bordeaux: Conderc et Degréteau.
- DE VISIANI, R. Florae Dalmaticae supplementum. Berlin: Friedländer.
- DUJARDIN-BEAUMETZ, M. Du chlorhydrate de triméthylamine dans le traitement du rhumatisme articulaire aigu. Paris: Hennuyer.
- DUVAL-JOVVE, J. Diaphragmes vasculifères des monocotylédones aquatiques. Paris: Baillière.
- FOURNIER, E. Déviations des compas. Paris: Bertrand.
- GARCET, H. Leçons nouvelles des cosmographie. Paris: Delagrave.
- GAUDRY, A. Cours de paléontologie. Paris: Martinet.
- GRÜNBERG, H. Der 13 November, 1872. Gedanken ueber die Sturmfluthen der Ostsee, ihre Ursachen, und ihre Folgen. Stralsund: Bremer.
- HERING, T. Histologische und experimentelle Studien ueber Tuberkulose. Berlin: Hirschwald.
- JOSEPH, G. Morphologische Studien am Kopfskelet des Menschen und der Wirbelthiere. Breslau: Korn.
- KNAUER, G. Das Facit aus E. von Hartmann's Philosophie d. Unbewussten. Berlin: Heimann.
- KRAMER, W. Die Ohrenheilkunde der letzten 50 Jahre. Berlin: Nicolai.
- KRIPPENDORF, H. Die Photographie als Unterrichtsgegenstand der Gewerkschule. Aarau: Sauerländer.
- KUHLMANN, F. Considérations sur la désagrégation des roches. Lille: Danel.
- LINDE, C. Bericht ueber Versuche an einer Ventildampfmaschine von 100 Pferdestärken. München: Ackermann.
- LORENZONI, G. Sulle osservazioni udometriche eseguite in Padova dal 1725 al 1871. Padova: Randi.
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- PICKET, F. J. Matériaux pour la paléontologie suisse. 6 Serie, 4-6 livr. Basel: Georg.
- POHL, E. Die Sool-Heil-Producte der Saline zu Aussee in Steiermark. Graz: Leykam-Josefthal.

- POIRÉ, P. Leçons de chimie. Corbeil: Crété.
- PROWE, L. Festrede zur 4 Seculär-Feier des Geburtstages von Nicolans Copernicus. Berlin: Weidmann.
- RAMES, J. B. Géogénie du Cautal, avec une étude historique et critique sur les progrès de la géologie de ce département. Aurillac: Bouygues Frères.
- READ, W. The African Sketch Book. 2 vols. Smith, Elder, & Co.
- RUGGIERI, M. Notice sur la dynamite, son histoire, sa fabrication, ses propriétés physiques, sa conservation, &c. Paris: Tanera.
- SCHNEIDER, L. Roger Bacon Ord. min. Eine Monographie als Beitrag zur Geschichte der Philosophie d. 13 Jahrh. Augsburg: Krankfelder.
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- SOHR-BERGHAUS. Hand-Atlas der neueren Erdbeschreibung. Angabe für Oesterreich in 35 Blättern. Glogau: Flemming.
- STIEDA, L. Studien ueber den Amphioxus lanceolatus. Leipzig: Voss.
- TRASTOUR, E. Des hémoptysies congestioneelles et des craintes plus ou moins fondées qu'elles inspirent par rapport à la tuberculisation et à la phthisie pulmonaire. Nantes: Mellinet.
- VILLE, M. Exploration géologique du Beni Mzab du Sahara et de la région des steppes de la province d'Alger. Paris: Imp. nat.
- VOGLER, C. A. Ueber Ziele und Hilfsmittel geometrischer Praecisions-Nivellements. München: Lit. art. Anstalt.
- WINDELBAND, W. Ueber die Gewissheit der Erkenntniss. Berlin: Henschel.

History.

The Early History of the Property of Married Women, as collected from Roman and Hindoo Law. A Lecture delivered at Birmingham by Sir H. S. Maine, March 25th, 1873.

IN this lecture (which is reprinted for the Married Women's Property Committee) Sir H. Maine sketches the gradual emancipation of women, and shows that it formed part of the larger process by which the children, and in fact all parts of the family, have been gradually set free from the despotic power of the eldest male of the eldest ascending line, to whom the patriarchal family was absolutely subject. In Roman law the wife ultimately acquired full rights over her own property, but the Brahminical lawyers succeeded in checking the process of emancipation after it had proceeded some way in the same direction as at Rome; and there is but too much reason to believe that, as a childless widow in Bengal enjoyed her husband's property for her life, the custom of widow burning was introduced as a religious duty to get rid of her and her rights, and hence the anxiety of her family that the rite shall be performed, which seemed so striking to the first English observers of the practice—a practice which has no warrant whatever in the oldest monuments of Hindoo law and religion. In all this Sir H. Maine is only condensing what is already known, though he takes a larger view of the subject than is common; but he concludes with a most interesting sketch of the consequences of Augustus' law compelling opulent parents to create portions (*dotes*) for their marriageable daughters. The Christian Church, which strove to maintain the beneficent Roman law, tried to secure for the wife a provision of which the husband could not wantonly deprive her, and which would remain to her after his death, and hence the promise of the husband in the Marriage Service, "with all my worldly goods I thee endow," a formula which at first sight is puzzling. Hence the very strong feeling in France in favour of *dotation*, or portioning of daughters. Hence too the admirable contrivance in the Code Napoleon of having, so to speak, model settlements set forth ready-made in the law, which may be adopted or not at pleasure, and if adopted require only a few words on paper—whereas an English marriage settlement of any sort is cumbersome enough. We have only just obtained a partial improvement by the Married Women's Property Act. We would point too to the admirably clear account of the way in which the rule of distributing an inheritance *per stirpes* instead of *per capita*, shows that a given system of law has undergone development. We are glad to

hear that the lecture is to form part of a forthcoming work by the eminent author.

We would draw attention to Laveleye's article in the *Revue des deux Mondes* for June 1, on the Swiss "Allmends," that is, the property held in common by the villagers and other small bodies, by a custom of law which has been handed down from those primitive times which Sir H. Maine describes in his *Village Communities*. Laveleye strongly urges the political importance of the system as tending to prevent the frightful struggle between the richer and poorer classes which seems to threaten modern society. The detailed account of the mode of using the common woodlands, pastures, and commons is most valuable. C. W. BOASE.

Fasti Monastici Aevi Saxonici. By Walter de Gray Birch. (Published under the direction of the Royal Society of Literature.) Trübner and Co.

A COMPLETE index of the persons mentioned in Kemble's *Codex Diplomaticus* and other similar collections has long been a desideratum. Mr. Birch has partially supplied the want by compiling a comprehensive list of the heads of religious houses in England and Wales during the Saxon period, and promises further lists at a future time. He has of course made full use of Dugdale's *Monasticon*, Hardy's *Fasti*, and other works—ten in all; and has prefixed a chronological list of 300 religious houses established in England and Wales previous to the Norman Conquest. Mr. Birch had prepared the way for his work by a valuable monograph on the succession of the Abbots of Malmesbury, and we are also indebted to him for a detailed account of the life and writings of William of Malmesbury himself. It is obvious that it is only by means of such carefully prepared lists that we can gradually attain greater accuracy in dating the early charters, as the lists of witnesses (bishops and abbots always forming a large proportion of them) are often our best means of fixing the date. The same lists help us in detecting the numerous forged charters, as people are often made to sign as witnesses who were dead some time before or were not contemporaries at all. Of course too every improvement in dating the names accurately in one charter helps us as to the relative chronological position of others, and gives us firmer standing ground for our early history. We hope Mr. Birch will be able to still further add to and improve his list, and would suggest that some more names and dates may be got from the various monastic chronicles, which sometimes give things wanting in Dugdale, as even the last edition of the *Monasticon* is executed in a very unequal manner. Something too may be got from Boniface's and Alcuin's Letters, and others in Jaffé's *Monumenta*, e.g. Guthbert, abbot of Wearmouth and Jarrow 767 × 781 in Jaffé 3, p. 289-90 and 300; Eaba of Malmesbury 3, 300; 3, 97 gives the date 735 for Duda; 3, 166 supplies Sigebald of Chertsey 732 × 746; 3, 31 perhaps gives an abbess Sigegyth before 705. It would be convenient to have the Latin names of the monasteries added; and a few more identifications, e.g. Nursling = Nutshalling between Winchester and Southampton. How much correction is needed in the common lists William of Malmesbury's inaccurate account of Glastonbury sufficiently shows. In p. 28 Mr. Birch suggests Newminster as the place where the old Saxon calendar printed by Hampson originated. It has been already suggested in our columns that it was formed at Malmesbury. We understand that Mr. Birch is about to print this calendar together with other matter, and give a fuller list of the obits entered on it than Hampson's space allowed him to do. We trust his new publication will soon enable us to report his final conclusions on the subject.

C. W. BOASE.

Notes and Intelligence.

Dr. Adolf Schwarz' pamphlet on the History of the Jewish Calendar is a work of real value to chronologists. The author has, first of all, carefully sifted the writings of Slonimsky, Pineles, and other Jewish scholars, without neglecting the chronological works of Ideler and others. Subjects which have been studied for a generation by such eminent men can hardly be expected to yield a large harvest to new-comers. The author has perhaps given too much attention to the astronomical calculations in his last part, while the history and especially the Biblical period is insufficiently treated. We should rather have expected a mention of the Assyrian calendar, and perhaps also of the Samaritan system of the Jubilees.

A compilation which will be found exceedingly useful by all students of mediæval history has just issued from the press at Ratisbon. Its title is *Series Episcoporum Ecclesiae Catholicae*, ed. P. Pius Bonifacius Gams, O.S.B. The book professes to include all the bishops of the Western Church from the earliest times down to the date of publication. This design seems to have been carried out very fairly. As was to be anticipated the bishops of the English Church and the (so-called) Jansenist Church of the Netherlands are not included, but from the Roman point of view the catalogue seems to be very complete. At the end of each table a list of authorities is given. In many instances these lists are very complete, and for the German dioceses especially are of great use in directing the student to books which otherwise he might never have heard of.

An important omission has been made with regard to some of the ancient dioceses. No sign is given to indicate the point at which vague church tradition ends and history based on record evidence begins. It is no doubt important that the whole muster-roll should be given in each case, but we ought to know on every occasion whether faith or reason be the faculty that has guided the compiler.

We would draw attention to the 26th volume of the *Histoire Littéraire de la France* (period of the fourteenth century). In it Paulin Paris completes his account of the early French *chansons de geste*, and endeavours to trace the connection between the successive poems and poets. Haureau analyses the extant volumes of early sermons preached at Paris during this period. The mixture of French words and sentences with the Latin is very curious, and the familiar, not to say gross, tone of some of the preaching friars remarkable. Legends and anecdotes are introduced everywhere: one preacher tells how when he was a child he was afraid to pass through the "Septem viis" (a sort of "Seven Dials") because of the sort of people who lived there. A collection of ready-made sermons occurs—"Sermones parati, Dormi secure"—a significant title. The most important of the shorter notices concerns Pierre du Bois, the audacious writer in the time of Philip the Fair, with whom commences the series of legists who gave such powerful help to the crown in its struggle with the Church and the feudal nobles. We doubt the statement, p. 461, about Pierre de Limoges' library: "sex viginti" can hardly mean "126 volumes;" surely "26" is the proper interpretation, though classical Latin would have preferred "sex et viginti."

Contents of the Journals.

Revue Archéologique, Jan.-May, 1873, contains several series of articles on the excavations at Rome and in Cyprus; and the Abbé Cochet continues his account of recent finds in Normandy, especially in the old cemetery of S. Ouen at Rouen, where the lowest layers of tombs go back to early Christian times. E. Miller describes the inscriptions he has found in Thasos and other Greek islands, and adds a fragment of Appian's Roman History (on Arab divination). Böckh's great collection only contains six inscriptions from Thasos, we now possess more than two hundred. Two new inscriptions also come from Skyros. A good account is given (with plates) of the frescoes in the underground church of S. Clement at Rome, some of which are later than was at first supposed. Heuzey contributes notes on ancient Macedonia (Deuriopos and the course of the Erigon), and Rayet some late documents from Patmos, and E. Miller some Greek poems by Theodorus Prodrômus in the time of Manuel Comnenus (the essential requisite in these verses is to have an accent on the last syllable but one). Perrot begins an interesting history of ancient art in Asia Minor. Lastly, Michel Bréal writes an essay on the place which comparative grammar ought to hold in classical education. There are many interesting short articles—one of importance on the bronze age, with an approximation to a date for it, and a denial that in South Europe it can be separated from the age of iron. Some Celtic notes may be commended to our scholars.

Literarisches Centralblatt, May 24, describes Böhm's important catalogue of the MSS. in the Austrian Record Office, and criticises Palacky's *Urkundliche Beiträge zur Geschichte des Hussitenkrieges*, vol. i. (1419-28) and Sohm's *Die altdeutsche Reichs- u. berichts-verfassung*. A very full comment follows on Beames' *Comparative Grammar of the modern Aryan Languages of India*.—May 31 supplies some remarks on verses contained in the new volume of Mommsen's *Corpus Inscript-*

tionum, on Lange's *Roman Antiquities*, vol. iii., and on Krebs' book about Christian of Anhalt, the adviser of the Elector Palatine in the Bohemian war.—June 7 criticises Nitsch's book on the early Roman annalists, and describes the Brescian lawyer Albertano's *Liber Consolationis et Consilii*, which though a French adaptation became the source of Chaucer's "Tale of Melibe." Fournier's *Le théâtre français avant la renaissance 1450-1550* is praised, and Grimm's translation of Vasari's *Life of Raphael* reviewed a little less unfavourably than has been done in other journals.

In connection with the early French romances mentioned above as analysed in the *H. L. de la France* we would notice Suchier's *Ueber die Quelle Ulrichs von dem Türlin und die älteste gestalt der prise d'Orange*. The story of William of Orange forms a subcycle in the Legend of Charlemagne, and the poems on it are of great beauty and interest. We may refer to Ludlow's excellent analysis in his *Popular Epics of the Middle Ages*, which ought to be more generally known. The introductory poem to the well-known German form of the legend in Wolfram's "Willehalm" was written by Ulrich von dem Türlin, a Carinthian poet in King Ottocar's time, and Ulrich dedicated it to Ottocar somewhere between 1261 and 1275, perhaps about 1270. By an analysis of the MSS. Suchier shows that in its original form the introduction was written in sets of thirty-one verses, a rhymed triplet marking the close of each set. The whole poem consisted of 310 such sets. Türlin adopted the merest outline of the story from Wolfram, and filled it up from his own imaginative stores; for there were many ways in which it might be told how William took Orange and married fair Orable the Saracen queen, and fought the great battle of Arleschans (the plains of Arles). In Victor Hugo's *Légende des Siècles* will be found a vivid modern version of the early part of the legend. Türlin's "Willehalm" has come down to us in five recensions, which shows the popularity of the story and of the poet; in its original form it contains 9,610 verses (310 × 31). It is followed in the Heidelberg MS. by Ulrich's other poem, "The Knighting of Vivian," written in sets of thirty verses, without the concluding triplet. The popularity of the story in England is shown by Ordericus Vitalis' statement that a clerk named Gerold at the court of William the Conqueror sang of "the holy athlete William, who after a long knighthood renounced the world, and under the monastic rule gloriously did knight's service to the Lord." Ordericus says too "vulgo canitur a jocularibus de illo cantilena."

Bullettino dell' Instituto, March, contains a notice of the prehistoric tombs and walls of Corniculum (on one of the three peaked hills N.E. of Rome), and a review of Kiepert "On the Topography of Ancient Alexandria"—to which is appended an account of the Vatican MS. of Zeineddin's "Account of Alexandria and Antioch," which appears to rest simply on Edrisi's well-known book.—May, explains the Etruscan word *Malavisch* by the Latin *mollis*, which was originally *molvis*, the // being (as in other words) an assimilation of *lv*, and the form *mollusca* occurs in Plautus.—De Rossi gives an inscription relating to an "arbitrix emboliarum," i.e. apparently an *impresaria* of ballet girls; her name Theoro Bathylliana seems to refer to the rival pantomimic schools of Bathyllus (Mecenas' freedman) and Pylades.—Some tombs at Corneto are described, one of which has an admirable painting of a hunting scene; the inscriptions lately found at Rome and at Formiae are printed, and a notice follows of Friedländer's new edition of his monograph on the letters CONOB on coins, in which he refutes the objections to the old interpretation of the letters OB, viz., that they are the Greek numeral letters for 72, Constantine having ordained that a pound of gold should be coined into 72 solidi.

Altpreussische Monatschrift (and Provinzialblätter), April-May.—Hipler contributes a notice of the Biographers of Copernicus, and Töppen an account of the Marienwerder low lands on the Vistula, the embanking of which was due to the Teutonic order of knights.—A review of Emler's *Regesta diplomatica necnon epistolaria Bohemiae et Moraviae*, vol. i. and ii. (1253-72), points out the valuable references to the history of Prussia, since Ottocar of Bohemia twice led a crusade against the heathen people there in support of the Teutonic knights. Helm reports that the funeral urns found in Prussia are really of clay, and not, as some think, composed of ashes and blood.—Perlbach publishes five letters of the Minorites in the North German towns, 1276-82—one of them refers to the Great Fire at Lubeck in 1276.

New Publications.

- ARCHDALL, M. *Monasticum Hibernicum*, I.-VII. Dublin: Kelly.
BEER, Adf. Joseph II., Leopold II., u. Kaunitz. *Ihr Briefwechsel*. Wien: Braumüller.
BRANN, Marcus. De Herodis, qui dicitur, magni filiis patrem in imperio secutis. Pars I. Breslau: Skutsch.
BRAUN, F. Die Tage v. Canossa unter Heinrich IV. 1 Abth. Marburg: Braun.
CAPECELATRO, A. Geschichte der h. Catharina v. Siena u. d. Papis-thums ihrer Zeit. Würzburg: Standingar.

- CARLE, J. De Exceptionibus in Jure Romano. Torino: Fratelli Bocca.
CHÈREF-OU'DDINE, Chèref-Nâmesh, ou fastes de la nation Kourde. Tome 2, 1 Partie. Leipzig: Voss.
DE GASPARIN, Le Comte A. Luther et la Réforme au xvi^e Siècle. Paris: Lévy.
DE GROUCHY, Le Marquis. *Memoirs du Maréchal De Grouchy*. Paris: Dentu.
EGLI, Prof. E. Die Schlacht v. Cappel, 1531. Zurich: Schulthess.
HADDAN and STUBBS. Councils and Ecclesiastical Documents referring to Great Britain and Ireland. Vol. II. Part I. Macmillan.
JHERING, R. von. Geist d. römischen Rechts auf den verschiedenen Stufen seiner Entwickelg. Leipzig: Breitkopf und Härtel.
LAPLANE, H. De. Messieurs de Valbelle, évêques de Saint-Omer (1684-1754). Saint-Omer: Fleury-Lemaire.
MARVAUD, F. Histoire des vicomtes et de la vicomté de Limoges. Paris: Dumoulin.
MURALT, E. De. Essai de chronographie byzantine, 1057-1453. Tome ii. 8. Basel: Georg.
NEANDER, Mich. Bericht vom Closter Ilfeldt. Ein Beitrag zur Geschichte d. xvi. Jahrh. Göttingen: Peppmüller.
PHILIPPSON, M. Heinrich IV. u. Philip III. Die Begründg. d. franzöf. Uebergewichtes in Europa, 1598-1610. Berlin: Duncker.
RACKI, F. Acta conjurationem Bani Petri a Zrinio et com. Fr. Frangepani illustrantia. Agram: Cuppan.
ROLANDO, Dott. A. Della dignità imperiale di Carlomagno. Napoli: Detken e Rocholl.
SCHMIDT v. BERGENHOLD, J. F. Uebersichtliche Geschichte d. Bergbau- u. Hüttenwesens im König. Böhmen von den ältesten bis auf die neuesten Zeiten. Prag: Rziwnatz.
STUMPF, Prof. D. Karl Frdr. Die Reichskanzler vornehmlich d. 10, 11, u. 12 Jahrhunderts. Nebst e. Beitrage zu den Regesten u. zur Kritik der Kaiserurkunden dieser Zeit. 3 Bd. 3 Abth. Acta Imperii adhuc inedita. Innsbruck: Wagner.
THOENES, C. Gelasius I. Wiesbaden: Killingier.
TRADITION u. Urkunde vom Fürstenhause Anhalt in der Graffschaft Askanien. Dessau: Barth.
VIVENOT, H. R. V. Quellen zur Geschichte der deutschen Kaiserpolitik Oesterreichs während der französischen Revolutionskriege 1790-1801. Wien: Braumüller.
WAITZ, G. Die Formeln der deutschen Königs- u. der römischen Kaiser-Krönung vom 10 bis zum 12 Jahrh. Göttingen: Dieterich.

Philology.

On Numerals as Signs of Primeval Unity among Mankind. By Robert Ellis, B.D. Trübner & Co. 1873.

MR. ELLIS has shown praiseworthy diligence in collecting and comparing the numerals of all the languages and dialects of the world, known and unknown. But his success is not equally satisfactory. The object of his work is to prove the primeval unity of mankind by pointing out the fundamental identity of the numerals throughout the globe, and their common origin from words which mean "finger" and "finger-finger" or "hand." The human race is supposed to have spread from the Paropamisus; the inhabitants of S. Africa, Australasia, and N. Asia and Europe having started first, and including at least two other rings of later emigrants.

The method by which these results are gained is simple enough. The numerals are assumed to be derived from words which signified "finger," "hand," "foot," and the like, either separately or in composition with one another. Any resemblance between these in two languages, however remotely separated, is taken to be a proof of a common origin; and as great laxity is allowed in the equivalence of letters, while it is considered indifferent for the purposes of comparison what numerals or parts of the body may be denoted, it is not difficult to discover resemblances and coincidences all over the world. The number of different phonetic sounds employed in language is, after all, but limited; and when we find the English *white* grouped with the Lesgi *tsa*, "fire," the Esthonian *ku*, "moon," the Bornu *bul*, "white," the Hebrew *chseph*, "silver," and the Basque *gorri*, "red," it is plain that we have to deal with an elastic principle by means of which anything may be made out of

anything. Mr. Ellis has revived the art of making the vowels count for nothing and the consonants for very little.

If there is anything which comparative philology lays down clearly, it is that in comparing languages we must set aside all apparent coincidences in the vocabulary. The only legitimate sign of relationship between two dialects is likeness of grammar, structure, and phonology. When a connection has once been established by means of these, we may proceed to compare the lexicons. Nothing is more illusory than chance resemblances between words, with whose history we are unacquainted. What, for instance, can be more like at first sight than the North American *potómac*, "river," and the Greek *ποταμός*, or more unlike than *wig* and *pilus*; and yet we know that the words are related in the second case, whereas *ποταμός* comes from a root *pā*, "to drink," while *potómac* is a polysynthetic compound. The canon ought never to be forgotten that we may compare roots but not derivatives. Mr. Ellis, however, is not even satisfied with bringing together words of similar sound and meaning: provided the letters may interchange in some family of speech—Aryan, Semitic, or Altaic—or the vocables may represent in one idiom what is assumed to be the origin of a like-sounding numeral in another totally unconnected language, their relationship is regarded as indubitable. Where other means fail, the numerals are arbitrarily divided into what are supposed to be their component elements; the Sanskrit *chatur*, "four," for example, is resolved into 2+2 in the masculine and 1+3 in the feminine. But it is in this part of the subject especially that the consequences of neglecting to trace the history of a word are most evident. It is always dangerous to manipulate the vocabulary of a language with which we are unacquainted, and a slight knowledge of Basque phonology would have taught Mr. Ellis that the *r* in *bederatsi*, "nine" (1—10) and *zortsi*, "eight" (2—10) is euphonic as in the genitive and dative sing. of the article and personal pronouns. So, too, *hamar*, "ten," has nothing to do with the African *omo-ka*, "finger," but must with Schott be referred to the same source as the Mordvinian *kāmen*.

It will be seen from this that those who believe in the aboriginal diversity of the various races of mankind have little to fear from Mr. Ellis's researches. Indeed, were his conclusions founded on ever so firm a basis they would still be insufficient to support his main thesis. Linguistic and physical unity are not convertible terms; and those who confound them together show that they have yet to learn the first principles of a scientific philology. A. H. SAYCE.

Mélanges Philologiques. Par Wilhelm Naumann. 1. Prononciation du *C* Latin. Paris: Sandoz et Fischbacher.

M. NAUMANN is determined to present the Romans of the classical period, will they nill they, with a sibilant *c* before *e* and *i*. What is the exact sibilant which this letter represented to them is, he admits (p. 79), hard to determine amid the variations exhibited by the Romance languages; and he therefore thinks that the best practical solution of the matter will be that every nation should pronounce its Latin *c*, and indeed its Latin in general, in its own fashion. This every nation has a perfect right to do; but, according to M. Naumann, *c* before *e* and *i* never was pronounced like *k*: never, and by no class in Rome. "Il n'y a pas une classe de la société romaine qui eût accueilli une telle mutilation de l'harmonie originale, et cela pour aucun autre but que pour complaire aux chimères d'une certaine coterie savante dont on détestait toujours à Rome hautement l'influence et les théories." For this conclusion, which may be surprising to some scholars, reasons thick as blackberries are forthcoming through M. Naumann's eighty pages. It has indeed been

urged by scholars who vaunt a seeming erudition that in the age of classical Latin the Greeks transcribed the Latin *c*, before whatever vowel it occurred, by *κ*: and conversely that the Latin *c* represented the Greek *κ* under all circumstances; but then the Greeks, nay Plautus himself, called the Romans *βάρβαροι*; and what does this imply but that the Greeks were destitute of linguistic sense? The Greeks, the captors of their conquerors, could never learn their conquerors' language. There was an "abyss" between the two nations, created by the "almost impossibility" which existed for a Greek to pronounce Latin with correctness. The hungry Greekling was an accomplished being, but there was one thing which he lacked, at least in the first century A.D.: for his successors four centuries later improved in this matter, and managed to represent the sibilant *c* by a more expressive combination than a mere *κ*. And if it be asked why the Romans represented a Greek *κ* by *c*, the answer is plain: they had given up their own *k*. Why they gave it up is indeed at first sight hard to see: perhaps the following vowel was sufficient to mark the character of the preceding consonant. As for the Goths, with their *lukarna* for *lucerna*, *akeits* for *actum*, &c., they were writing in Greek characters: and besides, there was no *c* sibilant in Gothic, because in Gothic *haims* answers to the Latin *civis*. But indeed, if Gothic is to be our guide, why should we not adopt Gothic forms in the lump? And if Celtic words, taken from the Latin, represent the Latin *c* by a *c* (hard) at the beginning of a word, and a *g* (hard) in the middle, this shows that the Latin *c* had a variable pronunciation.

Another argument advanced in favour of the pseudo-science which would attribute to the Romans a guttural *c* before *e* and *i* has been that there is no hint in any Roman grammarian, or in Varro, or in Quintilian, of any difference in the pronunciation of *c* determined by the following vowel. This argument gives M. Naumann as little trouble as that from transcriptions. Swift justly complains of the absence in Homer of all mention of a save-all, and cannot away with the unsatisfactory character of his long dissertation upon tea. With equal justice M. Naumann finds, in the silence of the grammarians on a point which must have obtruded itself upon their notice, an additional proof of their incompetence. Varro was a bad hand at etymology: of what weight then can the authority of a Roman grammarian be on a point of pronunciation? Probably his attention was concentrated on smaller points: on the nature and right use of the aspirate, or, if so be, on the difference between Greek *φ* and Roman *f*: problems far easier of solution and clear explanation than the difference between a guttural and sibilant *c*.

Everywhere, indeed, in Latin and out of it, are found traces of a "certain assibilation" of *c* before *e* and *i*. The French found a soft *c* in Latin when the Romans came to Gaul: it existed in the Messapian dialect, nor was the Umbrian without it. The Oscan *k* and *q*, apparently so much against us, were perhaps due to Greek influence. Then there are Sanskrit and Lithuanian and Slavonic, giving us sibilants as the etymological equivalents for Greek *κ* and Latin *c*: what indeed can be plainer than that the Latin *c* represents the Sanskrit *ç*, and that where Latin turned this into a guttural before *a*, *o*, and *u*, the conversion was due to the force "d'une énergie intrinsèque"? There is also the Greek *σσ* = *κκ* and *δι* ("comparaisons bien vagues, il est vrai, bien rapidement jetées ici") and other etymological and grammatical facts. The author's conclusion, in short (to be serious for a moment), is taken for granted throughout; and it is a pity that he should have taken the trouble of supporting it by arguments such as those of which we have endeavoured to give a fair specimen.

H. NETTLESHIP.

ON THE LANGUAGE OF LOOKS, EXPRESSION BY MIEN,
GESTURES, AND MODULATIONS.

To the Editor of the ACADEMY.

A recent invitation to lecture before an anthropological society reminded me of a train of thought on the above subject which perhaps might repay fuller development than I am at present or may hereafter be able to give it. It may be of use to sketch briefly the line of ideas which I should have proposed to follow out, either in case I should be able to return to the subject at a future time, or to direct to it the attention of fellow students inclined to pursue the same inquiry.

It is usual to understand by the word language nothing but articulate speech, and to overlook the fact that this is always more or less—and chiefly when it aims at being most forcible—accompanied by the accessories referred to in the above heading; that these accessories sometimes even serve as a substitute for speech, and that it is possible to communicate perceptions, sentiments, feelings, thoughts, and intentions by their use without any assistance from articulate words. Three of these accessories—looks, play of feature, and modulation of voice—seem to agree in all nations; the fourth, gestures, does so at least in part, so that they form the *connecting* element in the reciprocal interchange of ideas between the whole of mankind, in complete contrast to articulate language, which makes itself felt as an element of *division* separating *mankind* into *nations*. These accessories of speech seem accordingly to deserve more attention than has hitherto been paid to them, and this on several grounds:

1. In themselves, as essential and very important utterances of the human soul, which require to have their whole extent apprehended in order that if possible their deeper causes may be comprehended.
2. In order to ascertain what utterances of this kind are common to *all* or *many* nations, which are peculiar to a few, and wherein they differ from each other, that we may be in a position to determine what part of them belongs to humanity in general, and what is restricted to special aggregations of men hanging naturally together; what rests upon universal laws, and what upon convention.
3. Because they make the purely human origin of articulate speech more easily intelligible; for we certainly must credit them with the capacity of assigning to any sound or combination of sounds the meaning which the first man who joined together these articulations and their accessories was impelled or intended to express by them.
4. Because they are in like manner calculated to explain many phenomena in the development of articulate speech, or at least to make them intelligible and conceivable. It is, for instance, an undeniable fact that families of nations belonging to the same race have developed families of languages which from a philological point of view are perfectly irreconcilable. Thus the Indo-Germans are reckoned, on physical and psychological grounds, as forming one—the so called *curly-haired*—race, which also includes the Semito-Hamites, Basques, and Caucasian tribes, and even the Dravidians of East Asia and the Nubians of Africa. These national groups have within historical times formed groups of languages that philology can neither connect with the Indo-Germanic group nor with each other. This fact becomes intelligible if we may assume that, at the time when the ancestors of these national groups separated themselves from the common root or base of the whole race, these accessories of articulate speech were so far predominant over the articulate speech itself that articulate sounds and sound combinations were used only in a few cases with a connotative value assigned to them, or if the practice of giving a value to them had already reached a considerable development, the value was so little assured by habit that after separation other sounds and sound-combinations might take their place by association with the same accessories.

With respect to the significance of these accessories of, or even substitutes for, articulate speech, it is to be desired:

1. That travellers should pay great attention to everything that seems to bear in any way upon the subject and describe their observations as exactly as possible.
2. That authors engaged in compiling grammars of living languages, instead of limiting their attention to immediate practical acquirements,

should allow themselves to be guided by the thought that it is the business of a scientific grammar to characterize and describe as accurately as possible *all* the means of which a language makes use in order to attain to complete understanding of the communications exchanged in living intercourse. An exact description of the above mentioned accessories of articulate speech might certainly be begun with living languages, and completed by degrees. It would give to the grammars of the latter a value as compared with those of the dead languages which could never be surpassed, hardly indeed equalled in, importance by the deeper insight which these give us into the construction and development of articulate speech.

THEODOR BENFEY.

THE CHALDEAN ACCOUNT OF THE DELUGE.

To the Editor of the ACADEMY.

SIR,—In my article on the Chaldean account of the Deluge in the *Academy* for April 15th I noticed the geographical difficulty which alone seemed to stand in the way of our identifying the Tam-zi of the story with Anu or Susru. Nizir, where the Babylonian ark rested, lay eastward of Assyria; whereas Guti or Kutu, which is called "the fortress (*gisgal*) of Anu," has generally been supposed to be the country between Syria and the Euphrates. I now find, however, that this is not the case. In W. A. I., ii. 51, i. 21, Nizir is called a country of Guti or Gutium, and this fixes the situation of the latter to the north-east of Babylonia, besides removing the geographical discrepancy already mentioned. We may thus understand how Sargon is able to place Gutium between the Hittites on the north-west and Media on the east.

A. H. SAYCE.

June 19th, 1873.

Transactions of the Society of Biblical Archaeology. Vol. I.
London: Longmans. 1872.

IT is a great step in the right direction that a society should be formed in England for the systematic illustration of the Bible from a purely archaeological point of view. Theologians as well as Orientalists are under deep obligations to Dr. Birch and Mr. Joseph Bonomi, who in November, 1870, conceived the idea of its institution. And it is highly gratifying to find that so respectable a portion of the general public has responded to the appeal for funds. The tranquillizing, liberalizing effect of such a society as this will, we trust, be perceptible in the gradual diminution of those ungenerous suspicions which now harass the investigators of Biblical antiquities.

We have now before us, completed, the handsome and well-printed first volume of the Transactions of the society. It is therefore not inopportune to inquire how far the promises of the founders have been redeemed and their anticipations realized. A society supported by such eminent names as the present, and so firmly rooted in public estimation, can afford to dispense with flattery, and court an unbiassed criticism. In the first place theological neutrality has been strictly maintained—a condition of primary importance for its well-being which deserves to be pressed on the attention of both writers and speakers at the meetings of the society. Secondly, the scope of the institution has been interpreted with praiseworthy liberality, as is shown by the admission of such apparently remote subjects as the Cypriote inscriptions and the hieroglyphic tablet of Alexander described by Dr. Birch. Thirdly, its scientific character has been adequately though far from universally maintained. It would be useless to judge the Transactions of so mixed a body by too severe a standard of scholarship. We must be thankful if only a few of them are distinguished, either by the publication of fresh material, or by a criticism of facts new or old based throughout on definite principles. There are, it seems to me, but few papers in this volume which satisfy a high standard of criticism, few which are not to some extent injured, from a scholar's perhaps too partial point of view, by a regard for the "general reader," or by want of sound method and sufficient width of knowledge. Even such learned and really gifted writers as M. Chabas, Mr. Fox Talbot, and Mr. Cull will probably be thought to fail in one or both of these particulars. But every one, I think, will agree with me that the papers of most permanent value are those of Mr. G. Smith on the early history of Babylonia, of Mr. G. Smith and Dr. Birch on the Cypriote inscriptions, of Mr. Sayce on the origin of early Semitic civilization, and of Dr. Eisenlohr on the so-called Harris Papyrus.

I. Mr. George Smith gives extracts from the inscriptions of sixty-eight Babylonian kings. The chronology is uncertain till the reign of Kara-indas (cir. B.C. 1475), whose affairs are referred to in the Synchronous History of Assyria and Babylonia (W. A. I. ii. 65). The catalogue ends with Kin-zim, who was finally put down by Tiglath-Pileser in 727. We learn (p. 42) that *abda* in the famous *Abda Martu* (an appellation of Kudur-mabuk, identified by Rawlinson with Chedor-

laomer) is a lithographic error for *adda*, king or lord, as well as father. On page 46 we have a story about Sargon I. which singularly resembles that of Moses, just as we have an Egyptian parallel to the story of Joseph in Potiphar's house, a Buddhistic to that of Solomon's judgment, and several in various mythologies to those of Samson and Jonah. Mr. Fox Talbot (p. 272) also compares the Sargon-story with that of Romulus. On page 48 it is shown that the title "king of the four races" referred not to Mesopotamia, nor to the four quarters of the world, but to the four states of Syria; cf. Gen. x. 23. On page 53 Mr. Smith retracts two of his conjectures in *Academy*, vol. ii., p. 507. On page 89 a translation is given of a fragment relating to the Deluge which if M. Lenormant is correct (*Le Déluge*, p. 19) corresponds to a portion of the legend lately translated by Mr. Smith. Yet the versions do not at all coincide.

II. Mr. G. Smith has also the credit of having discovered forty of the fifty-one or fifty-four characters of the Cypriote alphabet or syllabary, as well as several names, and the personal pronoun *anuku*. The first clue was derived from a mutilated bilingual inscription found at Daly (Idalium) by Mr. Lang, British Consul at Larnaca. Mr. Smith would have made further progress had his knowledge of Greek been equal to his talent for deciphering.

III. Dr. Birch's paper on the same subject is fuller and more interesting. It is clear that "the general structure of the language, and many if not most of the words are Hellenic," yet "there is, no doubt, a foreign element extensively mixed with it, either a Pelagic dialect, or else that of an aboriginal population, to which must be added words that may have been introduced by Phœnician settlers or foreign conquerors." Dr. Birch gives the transliteration and translation of the Cypriote portion of the bilingual inscription, as well as of an inscription on a bronze plate also found at Daly. The date of the former is supposed to be about B.C. 370, that of the latter about 353.

IV. Mr. Sayce's paper is perhaps the one most suggestive of new ideas. After some trenchant remarks on the difficulties attending comparative Semitic philology, he points 1. to the sub-Semitic dialects of Africa as throwing light on the obscurities of Semitic grammar, owing to their descent from a more primitive stage of Semitic speech, 2. to the inscriptions and papyri of Arabia, Egypt, &c., as exhibiting the development of the different cognate dialects, and above all 3. to the cuneiform inscriptions, which have proved that "a thick substratum of Turanian civilization underlay Semitism in Western Asia" (p. 298). The receptive nature of the Semites has shown itself in the largely foreign character of their Pantheon, their science, and vocabulary. The Semitic traditions are equally Turanian in their origin. This part of the essay is too slightly worked out to be quite convincing, yet it is clear that there is much evidence in favour of the doctrine inculcated. I am certain of one point, that the parallels copied sedulously from one commentary into another between "Genesis and the Zendavesta" will not for the most part stand examination. But I still question whether any single key is sufficient to unlock the recesses of this cabinet of secrets. Then as to the vocabulary, Mr. Sayce thinks that "most of the so-called biliteral roots, and words relating to civilized life, are taken from Turanian Babylonia" (p. 304). Thus *ir*, city, is the Accadian *Uru*, which is translated by the Assyrian *du* = Heb. *ohel*, tent. "This takes us back to a time when the Semite nomade lived in tents, and had to derive his idea and name of 'city' from his Accadian neighbours." So again *gan* (in *gan-Eden*) is the Accadian *gun* or *gunu*, enclosure; *hêkal*, palace, temple, is the Accadian *ê-gal*, great house, as was already pointed out by M. Oppert. "Crown" is *egu* or *aga* in Accadian, *egu* or *agu* or *agagu* in Assyrian, and "the word in the primitive signification of 'circle' is known to the other Semitic tongues." I abstain reluctantly from further details on this really important subject. There is no doubt whatever in the mind of any candid student of Assyrian of the existence of such a linguistic relation as that here described; the question is whether Mr. Sayce has not pressed it to an extreme—whether the coincidences may not be sometimes accidental, and the Semite have had a greater degree of originality than is here supposed. *Adhuc sub judice lis est.*

V. Dr. Eisenlohr supposes that the great Harris Papyrus contains not only the history of the exploits of Ramses III., but also of the establishment of the Jewish religion by Moses and the subsequent emigration of the Jews out of Egypt. There are certain discrepancies, it is true, between the book of Exodus on the one hand, and Manetho and the papyrus on the other; but these may be surmounted by distinguishing between the political head of the revolution and the reformer of Egyptian religion, i.e. Moses. An article has already appeared on this subject in the *Academy*, vol. iv., p. 33. I need only add that the text is here given in full with a transliteration and interlinear translation, followed by a commentary.

T. K. CHEYNE.

Notes and Intelligence.

The interest excited by the proceedings of the Biblical Archaeological Society has encouraged a number of leading Orientalists to prepare a series of translations of Assyrian and Egyptian texts for the benefit of historical students. The selection of the records will not be confined

to those bearing directly on the text of the Bible, but embrace the entire range of Egyptian and Assyrian literature. The first volume will be issued by Messrs. Bagster and Sons, at a price to bring it within the reach of all who are interested in such subjects. It is highly satisfactory to learn that Dr. Samuel Birch has undertaken the general arrangement of the materials.

Sir H. Rawlinson writes to the *Athenæum* that he has just received from Baghdad (we presume from Mr. G. Smith) a clay contract-tablet dated in the first year of Evil Merodach. This is the first documentary evidence for the name of this king, which is thus seen to denote "man or servant, of Marduk" (*amil = avil*). Sir Henry forgets to notice that the true etymology has already been proposed by Dr. Schrader in his recent work *Die Keilinschriften und das A. T.* Indeed it can hardly be doubted that it has suggested itself independently to very many Assyrian scholars.

The May number of the *Revue Archéologique* contains a letter from M. Renan on the Inscription of Mesha, on which he has lately given a course of lectures at the Collège de France. M. Renan only indicates briefly those conjectures which he thinks have not yet been proposed by other scholars.

Messrs. Trübner & Co. have issued a prospectus of a new and "international" edition of Marsden's *Numismata Orientalia* to be published by subscription. They contemplate nothing less than a complete revision of the descriptive letterpress by the editor or editors who have established a claim to the confidence of scholars in each numismatic department. Besides the fifty-seven original plates, fresh illustrations will be incorporated from time to time in the form of woodcuts or special plates.

We have received information from Leipsic of the expected publication of a Neo-Syriac Dictionary with exact descriptions of the pronunciation and accentuation, as well as of the origin of loan-words. The Syriac portion of the manuscript, which belongs to Mr. Cobb, formerly missionary to the Nestorians, was composed by a Nestorian named Mushe of Geog Tapa (in Aderbijân); the meanings of words were added by another Nestorian, Benjamin of Taka, under the eye of Mr. Cobb. The work has been carefully edited with a view to publication by a member of the American mission born and bred in Urmia.

The Philological Society has just published the second annual address delivered by the president, Mr. A. J. Ellis. This interesting paper contains—besides the president's own five reports on *Phonology*, on the *Papers* read before the Philological Society in the three years ending 31st December, 1872, on *Basque* (in which he has received the invaluable assistance of Prince Louis Lucien Bonaparte), on the formation of an *English Dialect Society*, and on Prof. Max Müller's latest views of the *Philosophy of the Origin of Language*—six other reports, on *Hungarian* by A. J. Patterson, on *Sanskrit lexicons* by J. Muir, on *Sanskrit grammars* by Prof. Aufrecht, on *Greek* by J. Peile, of Christ's College, Cambridge, on *Latin* by Dr. W. Wagner, on *Early English* by F. J. Furnivall and the Rev. W. W. Skeat. English scholars will hardly fail to regret one omission: nothing is said of the attempt now in its third year of progress to alter our pronunciation of Latin. The experiment is perhaps a dubious one, but surely it deserves to be chronicled.

The authorities at Leiden intend to commemorate the three hundredth birthday of their university by publishing a chronological list of all the students who have matriculated there from 1575, the year of its foundation by William the Silent, down to the present time. We have seen some of the proof-sheets of the early pages of the book. It is evidently being produced with great care. To Englishmen, and perhaps still more to Scotchmen, it will have considerable interest, as many eminent men of both countries were educated there in the course of the seventeenth and eighteenth centuries.

The names will of course be taken verbatim from the register, and as they were inscribed therein by persons who had no knowledge of English the surnames of some of our countrymen have suffered no little distortion.

Contents of the Journals.

The *Indian Antiquary*, ed. by Jas. Burgess. Bombay. Part XVI. April, 1873.—On the Dialect of the Palis; by G. H. Damant. [List of some eighty words used by the Palis, but not found in Bengali].—Abhinanda the Gauda; by G. Bühler. [Extracts from two works of that writer, the *Rāmacharitra* and *Kādambarikathāsāra*, of which MSS. have been discovered by Dr. Bühler, and which contain some important historical statements. It appears from them that Abhinanda belonged to a family of Gauda or Bengal Brahmins, and that his sixth ancestor, Sakti, emigrated to, and settled in, Dārva-bhisāra, then forming part of the kingdom of Kāshmir. Dr. B. however believes that the poet, whom he places about 830-850 A.D., did not himself live in Kashmir but in Bengal, as is indicated by his surname Gauda as well as by the name of the ancestor of his patron, Dharmapāla, who belongs to the Pāla dynasty of Gauda.] The Seven Pagodas; by Rev. M. Phillips. [Account of the rock-cut temples at Mavaliveram].—On the Rules which govern Kanarese Poetry; by Capt. J. S. F. Mackenzie.—The Calendar of Tipū Sultān; by P. N. Purnaiya. [A calendar, differing from the ordinary Muhammedan one, said to have been

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REGISTERED FOR

TUESDAY, JULY 15, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Studies of the Greek Poets. By J. A. Symonds. Smith, Elder, & Co. 1873.

MORE than one of these very rich and musical essays have been noticed in the *Academy* at the time of their first appearance. It need not be said that they gain by being brought together, that for instance the essay on Pindar, with its admirable fulness, and actuality, which keeps us close throughout to a single poet, whose characteristics are adequately and imaginatively presented in the concrete, finds its natural complement and preparation in the more abstract and theoretical treatment of the Greek lyric poets, where the tendencies and filiation of the chief schools are admirably laid down. It is always a gain too when a sincere and earnest writer, even when he is so clear as Mr. Symonds, explains exactly the purpose of his work. His principal object has been "to bring Greek literature home to the general reader, and to apply to the Greek poets the same sort of criticism as that which modern classics receive." He fears that "with this aim in view" he "may have been led into extravagances of style;" it is not an extravagance to say "Pindar combines the strong flight of the eagle, the irresistible force of the torrent, the richness of Greek wine, the majestic pageantry of Nature in one of her sublime moods;" but it is something like an extravagance to call this figurative eloquence "plain critical language," even when it comes after a cascade of yet more gorgeous similes about sunsets and thunderstorms and the Motettes of Mozart.

Unfortunately it is impossible to bring Greek literature home to the general reader unless the general reader can read Greek with ease enough for enjoyment: and we are almost inclined to regret that Mr. Symonds, who does not postulate this impossible condition, has kept his benevolent purpose before him with so much pertinacity. If he had been content to write for cultivated readers he might have carried the discussion further and have kept it on a higher level: as it is the didactic and æsthetic tendencies cross each other, and it cannot be said that they always reinforce each other. Essays like those on the Anthology and the Satirists and Gnomic Poets give well selected information pleasantly, the quotations are relieved by well placed and well

chosen epithets; and we come now and then upon a good suggestion, e.g. that the pithy terseness of Archilochus and his "racy epigrams, in which the subject was set forth with exquisite point and without circumlocution, must have been an acceptable novelty to an audience" jaded with epics. But upon the whole they are idle reading: classical scholars would be better employed in re-reading the originals; those who are not classical scholars would be better employed on the literature of languages which they know or the history of periods they may hope to understand. It is difficult to imagine with what purpose, didactic or æsthetic, a learned and accomplished writer can sit down to treat the periods of Greek literature in thirty-six pages. Mr. Symonds escapes as well as could be expected; he skips from one summit to another without leaving out any or losing his balance: only he is rapid at the price of being breathless, and glowing at the price of being inflated. It is not pleasant to have to say such things of a writer who proves even in this unfortunate essay how well he ought always to write.

The essay on Empedocles is chiefly remarkable for a sort of opulent grandiosity of thought and diction that is highly appropriate to the subject. The essay on the Idyllists deserves higher praise; it is nothing but pure nectar; if it did not contain a single trustworthy statement or a single original idea it would still be worth reading for the warmth and grace and clearness of a style which the author's example encourages us to call fragrant and sunny. And the style is very far from being the chief merit of this brilliant and delightful essay: the questions which arise about the canon of Theocritus and his disciples are treated with a luminous tact which is almost a substitute for a solution. Moschus and Bion are characterised with a very rare combination of firmness and subtlety with sympathy, though the critic might have spoken more gently of the *Europa* if he had remembered that the "casket" of Moschus was the original of the "counterpane" of Catullus. A zealous Hellenist might even maintain that the Greek idyll is better arranged, though the Latin is a work of genius. But the chief value of the essay is in the lovely descriptions of Mediterranean coast scenery, and in the way in which the writer brings out Theocritus' sentiment for its beauties as shown partly in his epithets and still more in his natural use of the anthropomorphic symbolism by which the ancients were able to give concrete

shape to much sentiment which we can only express by language which if suggestive is vague and incoherent. The account of the myth of Acis and Galatea is especially good. The idyll on Hylas is made the text for some dainty and circumspect remarks upon the very delicate subject which Mr. Symonds by an euphemism which is not too misleading designates Greek chivalry.

The elementary contrasts between ancient and modern tragedy are treated with great depth and clearness in an essay that is perhaps remarkable rather for fulness of knowledge than for originality of suggestion; though there is a new and good remark, the remark that the practice upon which Horace founds his precept *Ne pueros coram populo Medea trucidet* was originally determined rather by mechanical than æsthetic considerations. Perhaps it is hypercritical to notice that the author has scarcely been enough upon his guard against leaving an impression that Greek tragedies were deliberately constructed out of the doctrines which Schlegel and others have traced in them. Mr. Symonds sometimes seems to write as if the art of Æschylus were as self-conscious as the art of Plato, and this is a most improbable assumption: the very limited and technical precepts of Lionardo da Vinci's treatise on painting show how late it may be before the most subtle artist realises the theory of his art. The final essay on the genius of Greek art is very beautiful, and brings out very clearly the value of *σωφροσύνη* as a substitute for what we are accustomed to call morality, and the selection of Walt Whitman of all men as the representative of the Greek spirit in our own day is a really luminous paradox. Perhaps it is a defect that Greek art is treated too much as an ideal unity without making sufficient allowance for the different tendencies of the different races which made up the Greek nation and the different periods of Greek national life. Mr. Symonds builds too much without qualification on the principle that sculpture was the typical Greek art: the Lesbian and Ionian lyrists lived before sculpture, which was created by Dorian gymnastic, and the Dorians, as he points out, had no indigenous poetry. In fact, though it is almost ungracious to say so, Mr. Symonds' benevolent fervour, though it never carries him beyond the limits of refinement in expression, tends to become a substitute for accuracy of thought.

G. A. SIMCOX.

Monographs Personal and Social. By Lord Houghton. John Murray. 1873.

It is not often that an author describes what he has aimed at and attained, so simply and felicitously as Lord Houghton has done in the following paragraph of the dedication of these monographs to Mr. Venables: "It seems to me that a truthful impression may be produced by a combination of general and personal observation, which, while it leaves the characters in the main to speak for themselves, aims at something like a literary unity of design. And when, as in the greater part of these notices, this interest is cemented by individual sympathy, there is a chance of the production of a more than transitory record." It does not affect the value of the impressions of an observer whose insight and opportunities are both above the average that he has not ever chosen to carry his analysis very far or to mar his finished sketches by a laborious completeness. Another less ideal reason for this incompleteness may be found in the fact that three at least of the Essays, those on Landor, on the Berrys, and on Sydney Smith, seem to have been planned as supplements to formal biographies, while that on Humboldt is *apropos* of his correspondence published by Varnhagen. Lord Houghton's method varies little: he sketches a character in outline; he brushes away controversies that have gathered

round such points as the alleged paganism of Heine, as the alleged indifference of Sydney Smith to a bishopric, as Miss Berry's chances of marrying Lord Orford, with a few words of easy authority. He seems to dislike discussion; in dealing for instance with such a subject as the works of Landor he searches for words of lofty and delicate homage to which Landor's title is incontestable, and is satisfied when he has found them. When he has measured the depth of the elder Miss Berry's melancholy and assured us of its genuineness, and brought out the contrast between inner sadness and outward prosperity, he does not ask whether her discontent was reasonable. He likes to rise at the end of a paper to consider some topic of general interest in the light of the character just described. Thus Colonel Selvis is an example of the blind disinterested devotion of officers of the Grand Army to France and the person of Napoleon: Humboldt at the Court of Berlin suggests the relation between men of thought and men of action: Sydney Smith suggests the contrast between Parsons then and Parsons now, where we are so apt to think without much reason that all the advantage is on the side of the present.

The chief interest of the paper on Cardinal Wiseman lies in the writer's perception of the irony of his career; it makes us feel what a misfortune it was to him from a secular point of view to be set to restore hierarchies and issue pastorals from the Flaminian gate. The paper on the last days of Heine is full of happy translations of well chosen poems, and contains the very touching reminiscences of a lady who consoled Heine at last after having been amused by him in his brilliant days at Boulogne. Of course the paper on Sydney Smith overflows with anecdote, though those which have appeared in Lady Holland's life are excluded. Here is an epigram manifestly prompted by his regret for a bishopric: "They now speak of the peculiar difficulties and restrictions of the Episcopal Office. I only read in Scripture of two inhibitions—boxing and polygamy."

The gems of the volume however are the social papers on the Berrys and Lady Ashburton. In the rest of the book we do not get beyond a pleasant acquaintanceship (and what an art it is to give us a pleasant acquaintanceship with a man like Landor); but we feel we know Miss Berry, with her pathetic consciousness of strength in excess of her opportunities hardening into something like cynicism; and though the treatment is at once more reserved and more intimate we almost know Lady Ashburton, whose impetuous gaiety and aristocratic frankness were indulged till they almost amounted to genius. The paper on Lady Ashburton includes a tribute to Charles Buller, with an account of two of his immortal squibs, one of which (the imaginary debate in the French Chamber on the Fancy Ball at St. James') Lord Houghton helped to concoct. Both will be often quoted, as well as the anecdote of Lady Ashburton's reconciliation with Thackeray. Perhaps the very delicate and suggestive appreciation of Lord Ashburton and his relation to his brilliant wife gives us a higher sense of the author's powers.

We shall look forward with great interest to Lord Houghton's political and literary monographs which are announced as in preparation: but we hope he will employ another corrector of the press—his present volume is very incorrectly printed.

G. A. SIMCOX.

LITERARY NOTES.

We have received a volume of *Essays und Studien*, by Dr. Hermann Ethé, consisting mainly of reprints from various German periodicals. About half the volume is devoted to critiques of decidedly second-rate modern German poets or

novelists, like Lappe, Lange (Philipp Galen), Adolph Böttger, and others, whose exact degree of literary merit the author believes to be slightly in excess of the comparative favour accorded them by the general run of readers and reviewers. It is obvious that studies of this class can only possess a limited kind of interest, and in some cases the reflection suggests itself that the critical balance might be most simply readjusted. Additional severity in judging popular favourites, instead of more scrupulous recognition of the small merits of authors who deserve popularity as little, but not less. In an article on the chief representatives of a very popular school of fiction, "the transatlantic exotic romance," there is a slight want of proportion in the writer's judgments, which are careful and conscientious to a fault, since he forgets how much contemporary fiction really falls below the minimum standard of literary intelligence which it is the business of the literary critic to apply; and it is curious to find a serious critic apparently still convinced of the veracity of Fennimore Cooper's delineations of the North American Indians. On the other hand, the merits of Böttger's verse, which are real as far as they go, and the intelligent, chivalrous sentimentalism of the unfortunate Maximilian of Mexico are well characterized; Julius Grosse deserves the space accorded him as a respectable lesser light in the literary firmament, and the appreciation of Richard Wagner as a dramatist is interesting because of its parallelism to the impression which his music itself makes upon those who are not his fanatical admirers and yet, unlike Dr. Ethé, do find music in his works. The rest of the volume is taken up with subjects more nearly akin to the author's special line of study, i.e. Persian and Oriental literature. There is a complete and readable account of the origin, fortunes, and doctrines of Babism, chiefly founded upon Gobineau, an original romance *The Maid of Bagdad*, which is half fairy tale, half study of Oriental scenery and sentiment, a class of work of which it is difficult to see the *raison d'être*, now that the poetical merit of genuine fairy tales is as generally appreciated as their literary and scientific importance. The article which should have been the most interesting in the volume, on the relationship between the legendary materials of Persia and the West, is rather desultory and inadequate. The author wastes a good deal of time in tracing parallels, with Shakespeare for instance, where the resemblance is either vague or accidental and quite independent of the skeleton of the legend. Dr. Ethé has not studied the subject of folklore or fairy-tales sufficiently to develop the special faculty which seizes the essential kernel of a myth and compares that, and that alone, with the parallel traditions of other lands. Those who have not read either the German or the French translation of the *Shah-nâmeh* will be interested by his extracts from that mine of legendary romance; but as he promises in his preface a "kritisch gesichtete und erschöpfende Darstellung" of the matter in hand, we are entitled to complain that he tells us nothing more than lies on the surface respecting the history in Persia of the *märchenhaft* element of Firdusi's great work. In 50 pp. it would, of course, have been impossible to give a comparative account of all the features common to the Persian epics and the nursery tales of most countries of Europe, but a Persian scholar might, we should have thought, have done something towards tracing the history of the legendary matter accepted purely as legend. Dr. Ethé compares the episode of Sal and Rudabeh with the loves of Romeo and Juliet, but it is a much more essential part of the tale that Rudabeh lets down her long hair, to serve as a ladder for her lover to ascend to her chamber, an incident found in the French story of Finetta, in the *Pentamerone*, and in modern folk-tales; Firdusi makes Sal decline the offer from politeness and find another mode of ascent, a piece of modern rationalism which shows how cautiously any version of a myth that rests on his authority must be received; but the fact that he did not venture to omit an incident which he makes appear preposterous shows the strength of the tradition which he followed. Dr. Ethé, again, compares the mysterious worm kept by Heftwad's daughter and slain by Ardeschir with all the treasure-guarding dragons of Norse and German Sagas, but he does not refer to Mohl's conjecture, which one or two phrases seem to make very plausible, that there is at least an allusion in the text to the introduction of silkworms, and the abnormal, dangerous growth of the reptile seems less akin to the stories of dragons or snakes than to the fancy, most frequently met with in mediæval fiction,

of an overgrown animal that preys upon its master; like the Jewish legend of a fly as big as a pigeon with copper beak and iron claws that preyed, for his sins against the Temple, upon the brain of the Emperor Titus.

M. Carrière contributes to the *Allgemeine Zeitung* (June 22 ff.) an account of the relations between Liebig and Graf von Platen, who were fellow students at the University of Erlangen, with some interesting details respecting the early life of the great chemist.

The Autobiography of Lucas Geizhöfler, recently published at Vienna, is a simple and straightforward account of the adventures of a wandering scholar and professor at the end of the sixteenth century; he had the fortune to escape death during the Massacre of St. Bartholomew, at which time he was lodging at Paris, in the house of a priest (of whose high charges and poor fare he complained in pathetic terms), by the connivance of his host, who stood at the house door, in full priestly garb, and steadily denied the presence of any Huguenot in his dwelling. The memoirs conclude when, at the age of forty, the writer settled at Augsburg and married, and are not without interest as a picture of the citizen life of the period.

Professor Hartt, of Cornell University, has published in the *Transactions of the American Philological Society* some valuable notes on the "Lingoa Geral" of the South American Indians, the modern form of the old Tupí language, which, however, has changed so much from that reduced to writing by the Jesuit missionaries of 200 years ago as to be almost unintelligible to travellers only acquainted with their grammars and dictionaries. Professor Hartt is preparing for publication a volume of legends, myths, &c., taken down from the natives as he was collecting materials for a fresh vocabulary. Many of the tales are old friends: the adventure of Jack the Giant-killer and the Welsh giant, the bird-maiden (with a dress of parrot feathers), water spirits of the Lorelei class, and wood spirits, with reversed feet, whose tracks lead the traveller astray, a race between the tortoise and the deer, won by the former, who stations her relations along the course at short distances, the gift to a hunter of arrows that cannot miss their mark, &c., are a few of the points of contact with the folklore of the Old World mentioned in this introductory paper.

Under the title "La Grande Armée à Moscou d'après les témoignages Muscovites" M. A. Rambaud paraphrases in the *Revue des deux Mondes* (July 1) a recent Russian publication, by the lady who uses the pseudonym T. Tolytchef. She had taken down, in the words of the few surviving witnesses of the events of 1812, such accounts of the burning of Moscow, the conduct of the invaders, and the temper of the vanquished as she could meet with. M. Rambaud not unnaturally selects for reproduction anecdotes which prove the French soldiers (and after them the Poles) to have been the most amiable and popular of invaders, but there are also stories of prudent revenge and resolute assassination which help to account for the rapid dwindling of the victorious force; the other point fixed in the narrators' memory was the destitution and suffering of the troops before the retreat, from the first entry into Moscow; the starving natives used to give clothes and food to the still more miserable foreigners.

An article on the Fall of O'Connell by R. Pauli in the June number of *Preussische Jahrbücher* (a chapter from the author's forthcoming third volume of the History of England from the Peace of 1813-14) may be profitably read in connection with the vindication of the Liberator's private character attempted in *Macmillan*.

Im neuen Reich (June 20) has an interesting paper on the Prussian *Abiturientenarbeiten*, or leaving examinations of the Gymnasium, by a commission of university professors. It appears that the schoolmasters (as it was surmised would be the case in England) are by no means content to accept the verdict of the commissioners when it chances to be unfavourable, while the universities complain of a gross ignorance of German literature and grammar and an undue taste for phrase-making, as characterising the students sent up for

examination from many if not most of the schools in the neighbourhood of the Rhine.

Prof. J. Frohschammer has just published a work *Das neue Wissen und der neue Glaube*, the tenor of which is sufficiently indicated by the same writer's paper on Dr. Strauss in the *Contemporary Review* for June.

Art and Archaeology.

A Theory of Harmony founded on the Tempered Scale. By John Stainer, M.A., Mus. Doc., Organist of St. Paul's Cathedral. Rivingtons. 1872.

DR. STAINER has prefixed to the second edition of his work on harmony two prefaces containing remarks on the relation of the physical laws of sound to the art of music. The first of these prefaces appeared in the original edition. In the second, the author disclaims the intention, apparently attributed to him by some critic, of discarding or under-rating the value of scientific research in this field. No fair-minded man can suppose, for a moment, that Dr. Stainer desires to assign to musical acoustics a lower position than that which he thinks it legitimately entitled to occupy. There still remains, however, the question whether he has rightly estimated the claims of that branch of physical science. This question I now propose to examine with the care due to opinions deliberately expressed by a musician of Dr. Stainer's reputation and official position.

Dr. Stainer holds that "the real bearing of the science of acoustics on the art of composition is exceedingly slight:" let us see then whether he gives it credit for the results which it has indisputably attained. Any one who has attended to the progress of acoustics during the last ten years knows that the physical causes on which dissonance in music depend have been completely determined by Professor Helmholtz. It was to be expected, therefore, that if Dr. Stainer had occasion to touch on the cause of dissonance in any particular interval, he would state what was at least not opposed to Helmholtz's demonstrated theory. At p. 11, however, he assigns, as the reason why the interval C—F $\sharp$ is discordant, *that the note D is implied*—an assertion which has no place in the true theory of dissonance, and is, in fact, entirely erroneous. The real reason is, of course, that the first harmonic (F $\sharp$) of the upper note is only separated by a semi-tone from the second harmonic (G) of the lower note. On p. viii appears the following passage, apparently meant to describe the method by which the consonant intervals of the scale are determined in the "mathematical theory of harmony":—

"From a few natural harmonics exhibited in a diagram about a dozen of the hundreds of chords in use are constructed; the insufficiency of the number of chords being then too apparent, Nature is taxed with being out of tune, and tempered intervals are introduced to allow of the construction of some of the most ordinary chords in music."

This may perhaps be a fair representation of the views of some theoretical musicians, but it is the merest caricature of the only doctrine which can properly be called a "mathematical theory of harmony," viz. that of Helmholtz. Only "a few" harmonics are, it is true, taken into account by this theory, because no more than a few are well developed in the sounds employed in music. So far from taxing Nature with being out of tune in order to introduce tempered intervals, the theory on the contrary taxes the tempered scale with being out of tune with Nature, and admits none but natural intervals.

Dr. Stainer's views as to the practicability of pure intonation are as follows:—

"It is said voices and instruments of the violin class, not only can, but do make use of an enharmonic scale. This is tantamount to saying

that singers and violinists, when reading from a separate part, know whether a note they are sounding is used by the composer according to its apparent notation, or as a part of a chord of a different nature, or as both interchangeably; and not only this, but are also aware in each case what the fundamental sound is, from which the ratios of vibrations are calculated, and what is the exact ratio of the note they are sounding, and in defiance of notation are altering the pitch of the sound, or in other words are making two or more notes out of the one before them, so as to adapt it to its various combinations. Such a statement may be taken for what it is worth" (p. vii).

The assertion that voices and violins can and do perform *natural intervals* is entirely untouched by the above arguments, which are valid only against a totally different assertion, viz. that such intervals can be executed at sight from a *single part* written in the *established musical notation*. In fact Dr. Stainer has here merely dressed up a dummy, and then demolished it to his own satisfaction. All that is requisite in order to execute a natural interval is to have that interval definitely indicated. A single part written in the established notation does not supply such an indication. But let the performer know, either from a glance at the score or from previous experience, in what relation the notes set down for him stand to the key-note for the time being, and the impossibility of pure intonation is at once done away with. A single part written in the "Tonic-Sol-Fa" notation gives, by the very principle of the system adopted, exactly this information at every step, and thus enables the executant to surmount with the utmost ease all the difficulties so unnecessarily heaped up by Dr. Stainer. The body of Tonic-Sol-Faists constitute a standing refutation of his assertion that voices cannot sing an enharmonic scale. With regard to violinists a decisive piece of evidence is to hand in an experiment made by Professor Helmholtz with the aid of Herr Joachim. By means of a harmonium containing stops tuned according to both the natural and tempered systems, it was conclusively ascertained that this eminent violinist played the enharmonic, and not the tempered scale.

The opening statement of our author (p. vii) that "the whole of our musical literature from the works of Bach to those of Wagner would be unavailable for instruments with an enharmonic scale" is at once overturned by the well-known fact that the most intricate concerted music has been published in, and is constantly being performed from, the Tonic-Sol-Fa notation, which is based exclusively on an enharmonic scale.

The above examination of the positions taken up by Dr. Stainer seems necessarily to point to but one conclusion, viz. that he has not sufficiently acquainted himself with the latest results obtained in the domain of acoustics, and with the easily accessible facts by which those results are confirmed, to be able duly to appreciate the bearing of that science on music.

In passing to the subject of the classification of chords to which the bulk of Dr. Stainer's work is devoted, I desire to drop the confident tone hitherto adopted, and to speak simply as an amateur expressing the mode in which the practical conclusions of a musician of eminence and experience strike him. The principle of classification employed is "to begin with the tonic and to go on adding thirds from the scale until the whole of the notes of the scale are exhausted." The chords so obtained are named after the largest interval contained in them before inversion. The following considerations appear to be of some weight in estimating the value of this mode of classification. It can be carried out consistently only in the fundamental position of each chord: on inversion, other intervals besides thirds enter as constituents. Further, it artificially increases the number of inversions of particular chords, and involves the frequent mention of intervals wider than an octave, which

are not very easily recognized. The experience of teachers must decide how far, for instance, the two chords BDF♯C' and E♭B'DG' are best described as respectively "the sixth inversion of the major thirteenth of D" (p. 37) and "the sixth inversion of the chord of the minor thirteenth of G minor" (p. 46).

Two more points in which Dr. Stainer has deviated from the practice of his predecessors remain to be noticed. The first is that he has replaced the dull bald "examples" of the old harmony-books by a series of extremely well selected and most interesting citations from the works of the great writers. He is further to be congratulated on having shaken off the traditional maxims about "licences" and "forbidden sequences" to which the older harmonists were in so rigorous a bondage. SEDLEY TAYLOR.

THE MONASTERY OF SAN FRANCESCO AT ASSISI.

VISITORS to the monastery of San Francesco at Assisi will have observed great changes of late years in the aspect of the two churches which contain so many of the treasures of old Italian art. The friars who were allowed to end their days in the sanctuary of St. Francis have, most of them, passed away to a better world. Those that remain still say a mass for such as can pay for it; but even this will shortly cease, and Assisi will be the rendezvous exclusively of pilgrims not seeking for "the pardon of St. Francis." Under these circumstances it has been found possible to achieve what no one could have achieved so long as the friars had power, namely the restoration of the churches to their primitive condition.

As the traveller, at dawn, made his way into the lower church to see the rising sun illuminating the low vaultings of an edifice all covered with Florentine and Siennese paintings of the thirteenth and fourteenth centuries he found the grand effect of these masterpieces marred in many places by modern woodwork of orchestras and altars.—Giotto's Miracle of the Resurrection of the Child cut in two by a chorister stand, St. Hilarius in Lorenzetti's fresco of St. Francis receiving the Stigmata half covered by an orchestra. Fragments broken off in recent times for the sake of these needless additions have been sold for fabulous prices. Under the supervision of Signor Cavalcaselle these incongruities are rapidly disappearing, and the lower as well as the upper church are assuming something like the form they were intended to display when first they were planned. The same process is being carried out in both churches, namely the removal of modern additions particularly of woodwork, and the restoration of the pictures to their original size and importance. With the help of Signor Botti, who so ably cleaned and strengthened the frescoes of Giotto in the Scrovegni chapel at Padua, the frescoes are subjected to a necessary process of renovation which seals the painted surfaces to the intonaco as well as the intonaco to the substructure, due diligence being used to fill up with a durable medium the gaps which time and neglect have made in the walls. In the upper church a grand simplicity of lines has been attained by the removal of the wooden choirs, the wooden altars, organ and choir lofts. Of these all that is valuable, such as the choir ornaments and woodwork, are to be set up in one of the halls of the monastery. Wherever the old surfaces have been laid bare pillars and paintings have been brought to light which add to the beauty of the building. Two doors have been found leading from the choir to the wells of two spiral stairs forming an external communication between the upper and the lower churches. It is to be hoped that after all opposition has been overcome from clergy, local art committees, municipal councillors, prefects, and fiery members of the Italian parliament, new obstacles may not be raised to the completion of this most useful and interesting undertaking. The general clearance now made has greatly contributed to increase the magnificent effect produced by the grand proportion of the building. The transfer of the high altar of the upper church to the centre of the transept where it originally stood, the restoration of the steps which parted the transept from the nave, will it is confidently believed only heighten the effect realized in a manner so striking and so happy by the earlier changes already enumerated. J. A. CROWE.

DISCOVERY OF THE MISSING RAPHAEL TAPESTRY.

THE history of the Raphael designs and of the tapestries worked from them for the decoration of the Sistine Chapel forms quite a long episode in the history of Italian art. The survival of the seven cartoons now in the South Kensington Museum, under the barbarous treatment they have received, is in itself as remarkable as the survival of some of the weak, defenceless species of animals in the Darwinian account of the "struggle for existence." Every one knows that these cartoons were originally ten in number, and that the ten tapestries worked from them may still be seen on high festival days hung on the walls of the chapel for which they were designed. But besides these ten compositions from the lives of the apostles, it is known that Raphael designed an eleventh cartoon for the decoration of the high altar representing the coronation of the Virgin Mary. Both the cartoon and the tapestry of this grand altar-piece have been supposed by most writers on the subject to have long since perished. Passavant however gives a hint that this may possibly not have been the case, for in his *Life of Raphael* (tome ii., page 211) he says "Et maintenant que cette tapisserie soit encore enfouie dans quelque coin du Vatican, ou que pendant les orages de la Révolution elle ait été enlevée et détruite par l'appât de l'or qu'elle pouvait contenir, c'est un point que nous ne sommes pas parvenu à éclaircir."

Acting probably on this suggestion M. Paliard determined some time ago to search for this missing treasure, and in a letter addressed to the editor of the *Gazette des Beaux-Arts* of this month he announces for the first time the fortunate result of his labours. "I am happy," he says, "to announce to you that this tapestry (the Coronation of the Virgin) exists. I have found it."

After having carefully explored the atelier painted by Giovanni da Udine where the numerous tapestries of the Vatican are stored and repaired, after having visited the pontifical manufactory established at Saint Michel where old tapestries are often restored as well as new ones executed, and having searched every place where he thought the lost work was at all likely to be stowed away, M. Paliard was, he tells us, about to give up his quest in despair, when one day on questioning one of the foremen of the Saint Michel manufactory he was conducted by him to a room in the Vatican called "La stanza della predica dei famigliari" containing eight tapestries, among which he immediately recognised the "Coronation of the Virgin." The room in which it was hung was one of the private apartments of the Pope on the second story of the Vatican, and contained besides Raphael's altar-piece a tapestry of the "Last Supper" of Leonardo da Vinci apparently of the original size, a large tapestry from the Gobelin looms representing Athalia and Joas, Joas being a portrait of Louis XV. when very young, and five other smaller and less remarkable works.

The description M. Paliard gives of the tapestry that he has discovered does not differ from that of Passavant, except that the latter not having seen the original was not able to name the colours of the drapery of the figures.

God the Father clothed in red with a triangle of gold behind His head is over all. He holds a globe surmounted by a red cross in His left hand and extends the right to bless the world.

The Dove of the Spirit flies beneath, his rays descending upon the head of Christ, who is seated, clothed in red, and holds the crown above the head of his mother. His looks are directed towards her and not towards the Father as in the "Coronation" of the Maddalena Oddi. The Virgin, clothed in a red robe and blue mantle, is seated to the right of her Son and bends her head lowlywise to receive the crown. Two large angels, one on each side, hold the canopy of the throne on which she and her Son are seated. Below on the left is St. John the Baptist pointing to Christ, and on the right St. Jerome with his lion. These last two saints were probably introduced in honour of Leo X., St. John in allusion to his name, Giovanni de' Medici, and St. Jerome on account of the lion, *Leone* the designation chosen by him on his elevation to the Papacy. In the drawing at Oxford for this subject the saints are St. Peter and St. Paul.

The tissue of this latest discovered tapestry is the same as that of the other ten, and was probably brought with them from Arras, or as M. Paliard asserts, from some other town in Flanders.

In measuring the tapestries of the Sistine Chapel M. Paliard found them somewhat smaller than the corresponding cartoons at South Kensington, a fact he accounts for by the shrinking of the tissue when withdrawn from the looms, for it is evident by the pricks made in the cartoons, which extend to the edges, that the tapestries were woven direct from the designs.

One other circumstance is noticeable in the tapestry of the "Coronation of the Virgin." It has not been inversed in the weaving, as are the other ten tapestries. This inversion, which has in many respects marred the harmony of the other tapestries, would indeed have been ridiculous in this, for we should have had God the Father blessing with His left hand and holding the globe in His right; the Virgin crowned by the left hand of her Son and seated on his left side, besides the two saints below being respectively in the wrong position.

Such is the history that M. Paliard gives of this last treasure-trove in the world of art. After this, it is to be hoped that the missing cartoons may yet turn up in some nook or corner of the world. Would that South Kensington might be fortunate enough to secure them.

M. M. HEATON.

NOTES ON ART.

The *Gazette des Beaux-Arts* for July contains: 1. A description of a large Salon in the Château de Saint-Roch, on the borders of the Garonne, a newly-built mansion that has been artistically decorated by its proprietor, M. George de Monbri-son. The Salon of the Château especially has been magnificently adorned by the artist employed upon it, M. Lechevallier-Chevignard, in the style of the French Renaissance under Henri II. M. Olivier Merson, the writer of the article, considers that M. Chevignard has achieved a complete success in this work, "aussi savamment conçue dans son ensemble et ses parties, qu'heureusement poursuivie et terminée," but after all, judging from the two designs of panels given in the *Gazette*, the artist has only imitated old models. We seem to know every curve and Renaissance grotesque in the "Fragment du dallage en Faïence." Why cannot decorative artists find something new? —2. M. Ernest Renan continues and finishes his instructive account of Phœnician art. Unfortunately his subject is limited by reason of the very few remains that have been discovered of the art of this industrial nation. Nevertheless M. Renan divides the ancient monuments, &c., of Phœnicia into three distinct classes, corresponding it would seem, as in other countries, to three different epochs—viz. the monuments anterior to Greek influence, the monuments in which Greek or Græco-Roman influence is perceptible, and the monuments purely Greek or Roman. He recommends all future explorers of Phœnicia to keep to the sea-coast, as ancient Phœnicia was but a series of ports the civilisation of which did not extend far inland.—3. M. Georges Lafenestre concludes his criticism of the Salon of 1873 in a long article profusely illustrated with woodcuts from the various pictures noticed.—4. A description of the pictures in the Musée de Lille which will not, we imagine, tempt travellers to go out of their way in order to visit that museum, although M. Louis Gonse assures them that they will meet with some "rare and very Dutch masters" (*maîtres rares et très-hollandais*) that they do not often see in other exhibitions, and that "if they find less to admire they will perhaps find more to learn!"—5. An article by M. Henry Havard, entitled "Exposition Rétrospective d'Amsterdam," that gives an account of the various works of art exhibited by the Society *Arti et Amicitiae* at Amsterdam. Pictures were excluded from this exhibition, which was especially rich in the works of the jeweller, carver, cabinet-maker, and potter.—6. The letter of M. Paliard, of which the substance is given in another place, concerning the recovered tapestry of the "Coronation of the Virgin."

A fine etching by Le Rat of a portrait of a lady in a ruff attributed to Pourbus in the Rothan Gallery is the chief illustration of the number, although it is not mentioned in the list of illustrations and has nothing to do with the text.

The two new courts at the South Kensington Museum are nearly ready, and will probably be open before this note appears. Mr. J. H. Pollen is engaged on a descriptive catalogue of the works of art they contain, the value of which will be enhanced by biographical notices and historical criticism.

Dr. H. Holland has recently published the *Life and Works of Moritz von Schwind*. The artist's own letters and the remembrances of his friends make up the personal and most interesting part of the biography, but an analysis of Schwind's "artistic individuality," (*Künstlerischer Eigenthümlichkeit*), shows a certain amount of insight into the character and meaning of Schwind's art. Moritz von Schwind was one of the most popular artists of the modern German school, and much has been written about him by German critics: This is the second biography that has appeared of him, one by Führich having been published shortly after Schwind's death. At the same time with Dr. Holland's *Life*, Dr. Lücke has brought out Schwind's illustrations to *Cinderella* with an explanatory text, and also with an interesting biographical sketch of the artist.

The *Zeitschrift für bildende Kunst* is again enriched with one of Unger's admirable etchings from the Gallery at Cassel. This time it is a winter landscape by Rembrandt that has called forth his powers.

The current number of the *Portfolio* contains a beautiful etching by Mr. Hamerton, entitled "Crossing the Loch." A small boat with a large and peculiar lug-sail is driving through water which is all ablaze with the reflected light of an evening sky. The complex colours of the scene are wonderfully well rendered. "The Sylvan Year" is continued, and contains some very sensible remarks on the true value of detail in art. It is illustrated by two small etchings, one of which by Greux, after Dupré, is a perfect gem.

Josef von Keller, one of the best engravers in Germany, died a short time since at Düsseldorf, where for more than thirty years he had been a respected teacher in the Academy. His most celebrated work is a large engraving from Raphael's "Disputa" in the Vatican. Several other of Raphael's paintings were likewise engraved by him, and one of his last works was the "San Sisto Madonna." Scheffer's "Christ in the Tomb" is perhaps his best known though by no means his greatest engraving. Keller, who was born in 1815, may be considered the founder of the modern school of German engraving, and his influence is clearly seen in many of the works of the younger artists.

A congress will meet at Vienna on the 1st of September, not to decide, as we might at the first blush assume, upon the fate of the continent, but to discuss important questions in reference to science and art. The subjects to be ventilated are: our wants and duties as regards the administration of public galleries and the production of catalogues of pictures; the best methods of preserving pictures and drawings; methods of teaching in schools and universities; an universal register of works of art and reproductions of pictures and drawings. A congress of this kind, if attended by professional men from all parts of the world, may produce some good general results. It will certainly lead to a valuable interchange of ideas, and give to critics and art historians an opportunity of becoming acquainted with each other which it would be folly to neglect.

To make this congress attractive we have the International Exhibition—which many persons will visit for its own sake. Another display, unique of its kind as far as Austria is concerned, will add very greatly to the attractions of a visit. In August and September there will be an exhibition of works of the old masters selected from the private galleries of Vienna; and those who have any knowledge of these collections can tell how rich they are in fine examples of all the most celebrated schools.

New Publications.

- BOMPOIS, H. F. *Les Types Monétaires de la Guerre sociale. Étude numismatique.* Paris: Detaille.
 BRANDES, G. *Die Hauptströmungen der Literatur d. 19. Jahrh.* 2 Bd. *Die romant. Schule in Deutschland.* Berlin: Duncker.
 BRUYN, Abr. de. *Costumes civils et militaires du 16 siècle.* Reproduction facsimile de l'édition de 1581. München: Rosenthal.
 CLARETIE, J. *Molière, sa vie et ses œuvres.* Paris: Lemerre.
 COHAUSEN, A. von. *Römischer Schmelschmuck. Ein Beitrag zur Kenntniss der antiken kunstgewerbl. Technik.* Wiesbaden: Roth.

- DE GONCOURT, E. et T. Gavarni; l'homme et l'œuvre. Paris: Plon.
DELAUNAY. Les Artistes Scandinaves. Peintres et sculpteurs contemporains. 1^{re} livraison. Paris: Boyer.
ELZE, K. Jahrbuch der deutschen Shakespeare-Gesellschaft. Weimar: Huschke.
FÖRSTER, E. Denkmäler italienischer Malerei vom Verfall der Antike bis zum 16. Jahrh. 3 Bd. Leipzig: Weigel.
GRAESSE, Dr. J. G. T. Guide de l'amateur de Porcelaine et de Poteries. (Quatrième édition, revue, corrigée, et considérablement augmentée.) Dresden: Schönfeld.
HEINE, W. Japan. Beiträge zur Kenntniss d. Landes und seiner Bewohner. 1 Abth. 3 Lfg. Berlin: Bette.
HISTOIRE de la littérature de la France. Tome 26. Quatorzième siècle. Paris: Didot.
HOEISEL, C. Goethe's dramatische u. epische Hauptwerke kurz erläutert u. beurtheilt. Eisenach: Bacmeister.
HOSÄUS, W. Die Wörlitzer Antiken. Dessau: Barth.
MAILLIET, P. Catalogue descriptif des Monnaies obsidionales et de nécessité. Brussels: Muquardt.
MILLER, Joaquin. Life amongst the Modocs. Bentley.
PARVILLE, L. Architecture et décorations turques au 15^e siècle. 1^{re} série. Paris: A. Morel et Cie.
RIS-PAQUOT. Histoire générale de la faïence ancienne française et étrangère, considérée dans son histoire, sa nature, ses formes, et sa décoration. Brussels: Muquardt.
SABATIER, A. De l'influence des femmes sur la littérature française. Paris: Sandoz et Fischbacher.
SAINT-BEUVE, C. A. Lettres à la Princesse. Paris: Lévy.
SALAZARO, D. Studi sui Monumenti della Italia Meridionale dal iv. al xiii. secolo. Napoli: Detken e Rocholl.
VÖGELIN, Prof. S. Denkmäler der Weltgeschichte in malerischen Orig.-Ansichten in Stahl. Geschichtlich u. kunsthistorisch beschrieben. 19 u. 20 Lfg. Leipzig: Seemann.
WILLEMAERS, Prof. A. Le Cid, son histoire, son légende, ses poètes. Brussels: Muquardt.

Philosophy and Science.

Letters, Lectures, and Reviews, including "Phrontisterion, or Oxford in the 19th century." By the Very Rev. H. L. Mansel, D.D. Edited by H. M. Chandler. Murray.

THE only portion of this volume which has not been already published is of very slight value. It consists of (1) an attack on utilitarianism which must be pronounced inadequate and commonplace; and (2) a fragment on Berkeley, which would perhaps have been interesting, but as far as it goes only gives clearly and exactly that corrected view of Berkeleianism which we owe chiefly to Ferrier and Mr. Fraser.*

Nor do we think that the volume generally will tend to raise Mansel's reputation with those who only know his larger works. Though he was, in a certain sense, a man of learning, the range within which his mind worked effectively seems to have been very limited. On topics beyond this range, as e.g. on the oddly selected subjects of "Sensation Novels" and "Modern Spiritualism," he gives merely vigorous and condensed reflection of a perfectly commonplace kind, with a touch of thin, dry humour, and a meagre sprinkling of old-fashioned academic wit. The Aristophanic parody "Phrontisterion," directed against the first Oxford Commission, will no doubt entertain at least academic readers, even now. The dialogue between the "Model Manchester Man" and his son "Pheidippides-Johnny" is happily planned, and the Chorus of Cloudy Professors is in parts very effective: e.g. the Pantheists' Hymn is quite a *tour de force*.

"Hail Light with Darkness joined!
Thou Potent Impotence!
Thou Quantitative Point
Of all Indifference!"

* It ought to be said that before the appearance of Mr. Fraser's edition Mansel had shown (in Append. to *Prolegomena Logica*) that he was quite free from the vulgar misrepresentations of the Scotch polemic against Berkeley, which even the erudition of Hamilton did not dispel.

Great Non-existence, passing into Being,
Thou twofold Pole of the Electric one,
Thou Lawless Law, thou Seer all unseeing,
Thou Process, ever doing, never done!
Thou Positive Negation,
Negative Affirmation,
Thou great Totality of every thing
That never is, but ever doth become. . . ."

Still, generally speaking, though the verse is written with point and vigour, the substance of the satire is not much above the average level of an irritated common-room.

On graver and deeper topics again Mansel does not seem to have had much left to say, when he had sufficiently enforced the peculiar doctrines, logical and theological, with which he is identified. On "Freethinking," for example, one would have expected his remarks to be pregnant if not original: but the essay is almost entirely a piece of vigorous but very uninformative polemic. The function of barking continually as a sort of philosophic watch-dog at the gate of theological tradition does not tend to enrich the intellect, with however earnest sincerity (as in Mansel's case) it may have been embraced. On the other hand the article on "Modern German Philosophy" is an excellent piece of popular exposition, up to the point to which the writer has really understood what he is explaining. It would be hard to make the general scheme of the development of thought from Kant to Hegel plainer to common sense than he has here made it. But when he attempts to describe the Hegelian system, the exposition suddenly passes from luminosity into a most puzzling twilight. It is almost inexplicable how so careful a writer could have been misled into saying that "the highest abstraction of all . . . is in the Hegelian system the fullest and most complete reality"—thus actually reversing the true process of thought and identifying Hegel with Parmenides!

But even where Mansel is expounding his special views, we do not find quite so much clearness and consistency of statement as we should have expected. Take for example his well-known doctrine of the Limits of Religious Thought. It is surprisingly hard to ascertain what these limits precisely are. Sometimes he seems to propound what we may call Regulationism in its extremest form. Theological beliefs, we are told, are "designed not to satisfy our reason, but to guide our practice: not to tell us what God is, but how He wills that we should think of Him." Hence it is no argument against the "regulative truth" of two theological propositions that they contradict one another: e.g. it is right to believe at the same time that God "hears and answers prayer" and that "His counsel is immutable." Nay, further, it is quite useless to offer any explanation of the contradiction, for "as my conception of the nature and purposes of God is merely negative" such an explanation "explains nothing."

This language is definite enough: but it leaves us in great perplexity as to the method of theology. It is of no use to say that it is restricted to the interpretation of Revelation: for the deduction of dogma from Scripture is a process of reasoning, which has always been guided by the maxim that different texts of Scripture must be made mutually consistent. Now either this maxim is invalid, in which case the creeds must crumble again into a chaos of texts: or if it is valid, we require some criterion to distinguish the contradictions that we ought to avoid in theology from those that we ought to embrace. Such a criterion Mansel never offers: and he seems to deal in a perfectly arbitrary manner with the antinomies which beset the exercise of our reason when it strives to attain the absolute. E.g. (1) we can conceive neither "unlimited duration" nor "absolutely first moment of time": and here we are told that it is "impossible to believe that both can be true." Similarly (2) we cannot conceive either fixed

purpose or accessibility to prayer as attributes of the Infinite and Absolute Being: as far as we can conceive the two attributes they are strictly incompatible: yet here Mansel says that we *can* believe that they are capable of combination. In this he was perhaps imitating Kant, who also offers two different explanations of his two kinds of antinomies. But then Kant's are closely reasoned solutions, whereas Mansel's are unreasoned modes of dealing with the insoluble as such.

It is perhaps in order to avoid the harsh paradox of presenting theological dogma as a bundle of arbitrarily selected contradictions, that elsewhere the "Regulationism" of the passages above quoted is much softened down. In the phrase "regulative truth" the noun has quite lost its ordinary signification: it means not a belief which corresponds to a reality, but a belief that it is our duty to accept. But elsewhere he speaks of these beliefs as containing speculative truth of a "partial," "imperfect," "analogical" kind: and in one or two passages the assertion that we can only form a *negative* conception of God seems to mean no more than that we cannot form a *complete* or *adequate* conception of Him; which is a sufficiently trite and generally accepted proposition.

One point of interest in this collection of papers is the gradual divergence of Mansel's system from Kantism, which we are enabled to some extent to trace chronologically. The divergence originates in the attempt to base Kantian principles on empirical psychology. How great a change this procedure involved, it is doubtful whether Mansel ever clearly saw. Certainly in 1851 when he wrote on "Recent Extensions in Formal Logic" he had no idea of it. He then appears to accept altogether the Kantian view of cause, recognising (1) an analytical "principle of sense and effect" (better reason and consequent) governing hypothetical syllogisms, and (2) a corresponding synthetical principle, by which when "I hold a piece of wax to the fire and it begins to melt" I judge that the proximity of the fire is the *cause* of the melting of the wax. Here "the matter of the judgment is given in the successive phenomena, 'the fire is applied, the wax melts:' the form is given by the mind, which is compelled to assert a causal relation between them." All this sounds sufficiently Kantian, and probably seemed so to Mansel, until he began to ask himself what he precisely meant by saying that the mind was "compelled to assert" a causal relation. What Kant meant was that experience is strictly impossible without this assertion: for experience involves a distinction between the objective order in which facts occur and the subjective order of my own states of consciousness, which vanishes unless I conceive each successive phenomenon to stand in a determinate relation to some antecedent. But what did Mansel mean? Perhaps he scarcely knew at the time of writing this article: but two years afterwards when his *Prolegomena Logica* appeared it was clear that he meant a very different kind of "necessity" from the Kantian: a psychological, and (as he calls it) *negative* necessity, which really refers only to each individual phenomenon taken by itself, and has nothing properly to do with uniformity of sequence. In carrying out his principle of bringing philosophy to "the test of psychology" Mansel rather strangely combined Kant's view of cause as a form of thought with Hume's principle that every idea must be derived from an impression or presentation. This presentation is found in an act of will, when I am presented to myself as causing my own volition. But the application of an idea so derived to external phenomena can furnish no positive knowledge. It leads me to affirm nothing more of material changes than that I cannot conceive them to result from the self-determination of matter. And in fact we find

from Mansel's controversy with Whewell in 1853 that he had then arrived at a complete rejection of Rational Physics: and it appears from *Prolegomena Logica* that he had about the same time given up the hypothetical syllogism as a distinct form of reasoning.

H. SIDGWICK.

The Tongue not essential to Speech. By the Hon. Edward Twisleton. Murray. 1873.

THIS book is an elaborate examination of the credibility of the supposed miraculous restoration of speech in the case of certain persons known as the African confessors, who at Tiposa in the Roman province of Mauritania Cæsariensis at the end of the fifth century, to the number of fifty or sixty, suffered amputation of the tongue—as a punishment for resisting the authority of an Arian bishop. The alleged miracle is one which is recorded by Gibbon, who states the irresistible evidence in favour of its having occurred, but offers no explanation of it. It is one of the nine miracles selected by Dr. Newman in an essay published in 1843 as being true miracles, whilst spurious miracles were admitted by him to have been palmed upon the church both in apostolic times and in early and late post-apostolic periods. The miracle of the African confessors is the only one of the nine which is supported by the evidence of eye-witnesses. The evidence has been well sifted and criticized by a variety of inquirers. It baffled Gibbon and was a pillar of strength to Dr. Newman. In an appendix to this book, amongst other things Mr. Twisleton shows with considerable skill and by use of a wide range of information that the eight other miracles accepted by Dr. Newman are devoid of anything like conclusive or unimpeachable evidence. Hence the case of the African confessors becomes a very important one.

It collapses in a very curious way. The facts are admitted—they do not allow of a doubt—that the confessors did have their tongues cut out, and nevertheless they recovered speech. But so have a good many other people. Such recovery or retention of speech is not at all an uncommon thing, and the notion of a miracle in the matter is gratuitous and meaningless. This is the upshot of Mr. Twisleton's inquiry into the matter, and the history of belief in this now definitely exploded marvel forms a contribution to scientific literature highly interesting to the student of the varieties and modes of human superstition. The escape from loss of speech after excision of the tongue is no more supernatural than the escape from the dangers of an enchanted forest or the machinations of a reputed sorcerer, which has not unfrequently in past times been commemorated as a miraculous favour of providential interference.

A variety of cases are cited in great detail by Mr. Twisleton of persons in this and other countries who have been carefully examined by medical men (one case is attested by Professors Faraday and Huxley, Dean Milman, and Mr. Nunneley, the surgeon who operated) in which the power of speech was retained after excision of a portion or the whole of the tongue.

The Shahs of Persia in fact appear to be in the habit of causing this operation to be performed upon their subjects—together with that of burning the eyes with hot irons—when they have cause to feel ill-disposed towards them; and it is well known in that country that the power of speech is retained after the loss of the tongue. It is a curious fact, which is established by the evidence adduced in this volume, that speech is often less impaired by the removal of a large portion of the tongue than by merely cutting away the tip: and persons in the East who have been clumsily operated upon by the public executioner actually submit themselves to a kind of homœopathic cure for the impediment to speech

which such an operation produces : they have the tongue cut a second time.

There is then no ground for the popular notion that the tongue is the organ of speech in the sense that the eye is an organ of sight. Physiologists were sufficiently aware of this fact, but the truth may now be brought home to a more extended class. Loss of the tongue in the case of the person whose tongue was removed by Mr. Nunneley of Leeds, led to *impairment* of speech, as it probably does in all cases, but "his words were almost always intelligible, and the majority of them were very fairly pronounced." According to Professor Huxley's notes on this case, his pronunciation "accorded pretty well with what might have been predicted from the known mode in which the tongue takes part in the formation of different consonantal sounds."

E. RAY LANKESTER.

Notes on Scientific Work.

Geography.

Albert Nyanza.—The news which arrives from Khartoum that Sir Samuel Baker's returning party "declare as an ascertained fact that Lakes Tanganyika and Albert Nyanza are proved to be one and the same water," and that "a vessel can be launched above the Murchison Falls at the head of the Nyanza and sail away to Ujiji," must be received with the greatest caution, and very strong proof will be required to overturn the existing evidence, which tends to show that the Tanganyika is not connected in any way with the Albert Lake, but that it is rather a continental basin having no direct communication with the ocean. Burton and Speke visited its eastern and western shores and Livingstone has gone round its southern coasts, without hearing of an outlet; and Livingstone and Stanley's special voyage from Ujiji to examine its northern half in search of an outflowing river failed to find more than an inflowing mountain stream. The water of the Tanganyika is not altogether fresh: "they contrast it," says Burton, "unfavourably with the water of its rival the Nyanza; it appears, moreover, to corrode metal and leather with exceptional power," whereas the water of the Albert Lake is perfectly pure. The mean of many barometric and boiling-point observations made by Dr. Livingstone gave the Tanganyika an elevation of 2880 feet, whilst the best computation that has been made from Sir Samuel Baker's observations of the level of the Albert Lake makes its surface 2500 feet above the sea. The great mountain belt which is known to extend between these lakes, from Mt. Mfumbiro (10,000 feet) seen by Speke to the Bategga mountains described by Dr. Livingstone, also makes it in the highest degree improbable that any river communication can exist.

North Polar Area.—The evidence given by the rescued portion of the crew of the "Polaris" has advanced knowledge of the arctic basin two degrees nearer to the pole and forms the strongest argument that has yet been brought forward in favour of what is known as the "Smith Sound route." Hitherto Parry's furthest point 82° 45' attained by boat sledges on the Spitzbergen side of Greenland has been pointed to as far in advance of any latitude attained in repeated voyages through Baffin Bay, but the actual passage of the ship "Polaris" to the high latitude of 82° 16' in Smith Sound has demonstrated this to be a preferable way to the pole. From an elevation of 1700 feet on the coast near this latitude land has been seen as far, it is believed, as the 84th degree, or at a distance of only 360 miles from the centre of the unknown area.

Zoology.

The Branchial Rays of the Basking Shark (*Selachus maximus*). By Japetus Steenstrup.—This peculiar sieve-like apparatus, which somewhat resembles a comb with very long teeth, has for a long time been an object of interest to naturalists and a subject for investigation, though as yet no great light has been thrown on its origin or uses. Prof. Hannover in his memoir on the dermal spines of the rays and sharks investigated its internal structure, and having found that each ray was of the same histological structure as a shark's spine appears to have suggested that they were external appendages. Steenstrup was always opposed to this idea, believing from their general form and disposition that they play a part comparable with that of the rays met with on the branchial arches of many fishes and notably on those feeding on very small animals. Several facts having tended to convince Steenstrup that this apparatus must belong to some great shark he was glad to find his views supported by a passage in a paper by Bishop Gunnerus of Trondhjem, published in

1765, which gives a description of this apparatus too exact to leave any longer any doubt that it was portion of the branchial apparatus of the basking shark; moreover it has enabled him to better understand certain hints as to its use which are given in the writings of Low, Pennant, Mitchell, and others.

Steenstrup arrives at the following conclusions:—1. The basking shark has the interior of its mouth furnished with a fringe or branchial mesh which presents the appearance of small rays like whalebone about five or six inches in length. These meshes are situated along the enormous branchial splits and serve as a strainer to collect particles of food. 2. This branchial fringe is of the same nature as the ray-like bodies so long preserved in the museums of Copenhagen, Kiel, Christiania, and Trondhjem. 3. The existence of this sieve-like apparatus indicates with certainty that the mode of life of this shark resembles that of the whalebone cetaceans, and that so far from its being a fish which is dangerous from its carnivorous propensities it lives on small animals caught in masses by means of this sieve. 4. The presence of these rays and their teeth-like structure furnish quite peculiar generic characters to *Selachus*. 5. The form and nature of these branchial rays shows that the genus *Selachus* existed in the seas of Europe at least in the tertiary period, as the *Hannovera aurata* of Beneden has been found in the Belgian Crag. The similarity in habits of this shark to the great *Rhinodon typicus* of the Tropics as described by Dr. Perceval Wright is alluded to by Steenstrup, who likewise very justly suggests that the kind of food of both fishes is the same (*K. D. Vidensk. Selsk. Forhandl.* 1873, Nr. 1, pp. 47, 66).

On Bones Regurgitated by Birds of Prey and on their Markings. By Japetus Steenstrup.—Large masses of bones of small vertebrates, chiefly mammals and birds, have of late years been discovered in the caves of Europe, and more especially in those of Belgium. The occurrence of such masses has been explained in various ways. During the discussions on this subject Professor Steenstrup was asked for an opinion respecting certain markings and corroded surfaces met with on these bones, and he replies in a brochure bearing the above title by stating that his interpretation is based on an examination of the bones of animals which have lain a certain time in the digestive organs of birds of prey, and which exhibit peculiar markings and corrosions that appear quite comparable with those on the bones from the caverns. He figures some duck-bones from the stomach of an eagle, and the crania of some sparrows from the pellet of *Strix flammea*, all having the same markings on them as those found in the European caves. When therefore certain writers on the antiquity of man, judging from these vast accumulations of bones, have come to the decision that certain tribes of the primitive inhabitants of Belgium lived exclusively on field-mice and moles and such "small deer," these conclusions may, to say the least, be erroneous unless by primitive inhabitants we understand primitive raptorial.

When basing any calculation on the number of individual animals represented in any such collection of bones certain peculiarities of our birds of prey and other animals must, as Steenstrup remarks, not be overlooked. Some screech-owls, for example, prefer the heads of lemmings, and leave the bodies; the Lapland dogs only eat the fore-quarters of these little animals, while the Lapland fox would convey the whole of the animal to its den.

Steenstrup refers to the labours of his celebrated compatriot Dr. Lund in the caverns of Brazil, and gives an account of a cavern investigated by him in the estate called Escrevania. From this cavern during a fourteen weeks' exploration Dr. Lund extracted some 8348 barrels of material, each barrel weighing about four hundred weights; of these 6552 were of earth and 1796 of stones. Out of one of these barrels chosen at random from the first 4000 brought up Dr. Lund picked all the jaw-bones of mammals, and found that they numbered 2385, of which 18 belonged to *Cavia*, 26 to *Echimys*, 901 to *Didelphis*, and 1440 to species of mice. A certain amount in this selected barrel will of course have escaped detection by having been broken or having crumbled into dust, and assuming this quantity to be 10 per cent. Dr. Lund considers the number of individuals found in this cavern to be about seven millions and a half, and that the whole of these little animals had been killed and eaten by the owl of these caverns (*Strix perlata*, Licht), a species very nearly related to the *Strix flammea*, L. of Europe. Dr. Lund also makes the interesting calculation that this chamber house must have taken at least 5000 years to have become packed to this extent. (*Vidensk. Meddel. fra den naturhist. For. i. Kjöben.* 1872. Nr. 13. 14.)

Deep Sea Animals.—George Ossian Sars has just published a quarto memoir with six plates "On some remarkable forms of animal life from the great deeps off the Norwegian coast," being partly from manuscripts of the late Prof. Michael Sars. The memoir is published in English as being "one of the great universal languages." In a brief introduction G. O. Sars reminds us that his father as early as 1850 declared himself opposed to Forbes's theory that the limit in depth of animal life in the ocean was 300 fathoms, and that it is to his investigations in 1868 at Lofoten that science is indebted for the knowledge that several hundred species of animals were to be met with living at this very depth. The father's memoir on *Rhisocrinus lofotensis* will not soon be forgotten, and the species described in this memoir were taken by the son at about the same time that he collected this little sea-lily. A brief enumeration of these

new forms, which are excellently illustrated, will not be without use. Of Polyzoa *Rhabdopleura mirabilis* and *Flustra abyssicola* are described. The former of these is a species of very special interest. Allman, guided by their mode of development, seems to regard the Polyzoa as more nearly allied to the Lamellibranchiata than the Brachiopoda. Judging from the organisation of this form M. Sars seems to think that it is in all probability derived from a Hydrozoan stem, and however like a Polyzoan, still as wanting the endocyst or mantle, it may reasonably be doubted whether, as at present defined, it can be logically included in this group. The Avicularia in the deep sea *Flustra* are most remarkable, the mandibular portion being spoon-shaped and of large size. Of *Conchifera* *Yoldia obtusa* and *Pecchiolia abyssicola* are redescribed and figured. Of *Cephalophora* *Dentalium agile* sp. n., *Triopa incisa* sp. n., and *Goniolitis typica* gen. et spec. nov. are described; of Annelida *Umbellisyllis fasciata* nov. gen. et sp. and *Paramphionom pulchella* nov. gen. et sp.; and of Anthozoa *Mopsea borealis* sp. n. and *Fungiacyathus fragilis* nov. gen. et sp. The former, very nearly allied to *M. elongata* Esper., was found in about 300 fathoms at Skraaven not attached to rocks but living in a muddy bottom, while the latter, a new form of the free Turbinolidae, was brought up from a depth of about 300 fathoms in Lofoten in company with vast masses of *Ulocyathus arcticus*.

Of Spongiae are described *Trichostemma hemisphaericum* nov. gen. et spec., *Cladorhiza abyssicola* nov. gen. et spec., and *Hyalonema longissimum* sp. n.; this last form appears to be nearly related to the *H. boreale* Lov. and in no way allied to the genus *Hyalonema* of Gray. It is to be hoped that Mr. G. O. Sars will publish without delay further descriptions of the new species found by him in the great deeps off the Norwegian coasts.

Mollusca of Kristianiafjord. By W. C. Brogger. With an Appendix on the Land and Fluvial Mollusca and Leeches of the district, by O. S. Jensen. Christiania: J. Dahl.—Brogger points out that the deepest water off Drobak is only 120 fathoms, and records the species of mollusca met with in the different zones of depth from 120 fathoms to the littoral zone. The lists seem carefully prepared, and some comments on the more interesting species or varieties are appended to the lists of species. Jensen describes the land and fresh water forms and figures the *Pisidium arcaeforme* of Malm and a variety of *Arion ater* L.

Carcinological contributions to a Norwegian Fauna. By G. O. Sars. (Christiania: Published for the Royal Norwegian Society of Trondhjem.)—The first series of these contributions consists of a monograph of the Mysidae of the coast of Norway. Part i. of this monograph was published in 1870, and contained five lithographic plates. Part ii., issued late in 1872, contains three plates. It contains descriptions of a species of *Amblyops* (formerly *Amblyopsis*), *A. abbreviata*, and of three species of *Mysidopsis*, of which genus *Mysis didelphys* Norman is taken as the type.

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History.

Memoria fratris Walteri de Coventria. Ed. W. Stubbs. Vol. II. (Rolls Series.)

THE annals of the reign of John contained in this volume are one of the most valuable contributions in existence to the history of that eventful period. Walter of Coventry copied them from a compilation made in the ten monasteries (perhaps Crowland or Peterborough) which again copied the little Chronicle of the monastery of Barnwell in Suffolk, drawn up within the first thirty years of the thirteenth century. The continual and precise references to the history of the eastern midland counties, and the great importance given to the episode of Fawkes de Breaute, the central interest of which lies in the county of Bedford, are enough to show that its author had his home or his means of information at no great distance from Cambridge. It is the earliest narrative of the concluding years of John's reign, with the exception of the contemporary chronicle of Ralph of Coggeshall, which was also drawn up in an eastern county, and it is very superior to Abbot Ralph's work. Professor Stubbs has practically published it for the first time, as only fragments of it were printed in the *Recueil des Historiens de France*. And he has availed himself of it to give a sketch of the character and reign of John like those given of his father and brother in previous volumes of the series, which taken together supply an unrivalled account of the Angevin kings.

The verdict of history fully confirms Giraldus Cambrensis' opinion of John that of all tyrants he was the very worst. He was the youngest of Henry II.'s sons, and his father (like Charlemagne's son Louis) brought on the troubles of his later years by his attempts to provide for the youngest son out of the lands he had already arranged to distribute among his eldest. "The rebellion of the younger Henry was provoked by an attempt to carve out a portion for John; for John's sake the attack on Ireland was carried out, and the crown of peacock's feathers obtained from Rome; the final rebellion of Richard was caused by the demand that Poitou should be given up to John." But the favourite son threw himself on the side of his father's enemies, and broke his father's heart. He was equally ungrateful for Richard's kindness, but Richard on his death-bed recommended him to the baronage of England for election as king in preference to Arthur of Brittany—with good reason distrusting Arthur's mother, Constance, the unfaithful wife of the Earl of Chester. The Queen-mother Eleanor (of whom Prof.

Stubbs gives a striking account) together with Richard's able ministers, Hubert Walter, Geoffrey FitzPeter, and William Marshall, continued Henry II.'s policy, and succeeded in supporting John for many years. And it is important to note that "just as the position of the Angevin dynasty in France collapses on the death of Eleanor, so in England the death of Hubert Walter marks the break up of friendly relations between the king and the Church, and the death of Geoffrey FitzPeter the final rupture with the baronage; while the very existence of the royal line depended for years on the adhesion of William Marshall."

It is needless to add that John was ungrateful to all his faithful ministers. His conduct to his barons was atrocious. Even his half-brother, William Longsword, Earl of Salisbury, was driven into revolt by John's incest with his wife. His injured queen Hawis of Gloucester, whom he divorced, afterwards, as wife of Geoffrey de Mandeville, helped to swell the tide of national feeling against him in 1215. There seems to be nothing that can be said in John's favour except that, like all Eleanor's children, he had a sort of taste for literature. At least we hear of his borrowing a copy of Pliny from the Abbot of Reading (Disraeli, *Amenities* i. 221). Perhaps too the inclination to Mahometanism attributed to him may be due to his literary training—the same suspicions existed as to his son-in-law the Emperor Frederic II.—the fact being that Saracen, Manichean, and Aristotelian (through Averroes) modes of thought had really produced much scepticism, which was increased by the arbitrary and unchristian conduct of the Papacy. Yet when John's tomb was examined in 1797 (Green's *History of Worcester*, vol. 2, fin.) it was found that he had been buried in a monk's cowl! It may remind us of Milton's scornful line—

"Some as Franciscan think to pass disguised."

We may notice that Potthast in his valuable *Regesta Pontificum*, just published, under the date of May 29, 1198 states that the letter addressed by Innocent to John (after appointing Stephen Langton archbishop), in which he expounds the meaning of the precious stones in the four rings he had sent him in a way which Hume ridicules, was probably not sent to John at all, but was really addressed to Richard. As to the date of Queen Eleanor's death, Prof. Stubbs inclines to accept the date of April 1, and it may be remarked that this is the traditionary date in Shakespeare—

"Her ear

Is stopped with dust: the first of April died
Your noble mother; and, as I hear, my lord,
The lady Constance in a frenzy died
Three days before."

To Shakespeare is also due the sympathy felt for such a savage woman as Constance; but when the poet wrote that splendid lament over Arthur he was probably giving relief to his own feelings at the death of his own son, dead that very year, 1596, in which *King John* was written. Prof. Stubbs concludes his interesting preface with some new information about Roger of Hoveden, whose chronicle forms the middle portion of the series, which begins with Benedict of Peterborough and ends with Walter of Coventry. The abstract we have given of the preface to this volume can convey little idea of the fullness of information contained in it.

C. W. BOASE.

The Personal Life of George Grote. By Mrs. Grote. 8vo. Murray. 1873.

THE grandfather of George Grote, the historian of Greece, came to England from Bremen towards the middle of the last century; his son married a lady whose family was of

French origin, and the historian therefore well represents in his own person that mixture of races which has contributed so much to form the English nation. Young George Grote was educated at the Charterhouse in company with Thirlwall, Havelock, and other eminent men, and when the *History of Greece* appeared Thirlwall wrote a most generous letter to his old schoolfellow, speaking most modestly of his own admirable work on the same subject. Another schoolfellow was Waddington, the late Dean of Durham, and it is amusing to hear that they both fell under Dr. Raine's rod on account of a farewell supper which Grote had given at the "Albion" Tavern. He was destined to help his father in the banking-house, and had to provide for himself the higher resources of intellectual occupation. Besides keeping up his classical knowledge, he learnt the violoncello, and used to accompany his mother on that instrument in playing Handel's compositions. Bentham was equally devoted to music, and in fact the old English passion for music never died out even in the last century. He began also to study political economy. Ricardo's conversation possessed a potent charm for him, and Ricardo introduced him to James Mill. Mrs. Grote has printed the letters that passed between him and his friend G. W. Norman at this time; the two young men lived much together, and often joined in the cricket-matches of West Kent. There is a curious notice long afterwards of his joining Malthus and Romilly in a spirited game of cricket. Another friend, C. Cameron, led the way in metaphysical study.

It was at these social meetings in West Kent that Grote met with his future wife, and a more romantic story has rarely been told than that of the true love which was crossed for a time by a most unscrupulous rival, who assured Grote as a fact that he knew the lady's heart and hand were engaged to another man, while his father was set against his marrying at all. During the two years of this enforced separation he came more and more under the influence of James Mill, who had the faculty of kindling in his auditors the generous impulses towards the popular side, both in politics and social theories. Grote now became a reader of Bentham's works on Jurisprudence, Reform of the Law, and Political Philosophy, and also frequented the society of the recluse author, who took pleasure in receiving guests at his board, though never more than one at a time. To his one guest he would talk fluently, yet without caring to listen in his turn. John Stuart Mill was then studying under his father, but was too young to take much share in conversation. We trust that his autobiography will give us some more details of the remarkable group of men who thus met together. In all this Mrs. Grote amply redeems her promise of telling "the history of a mind." When the engagement with Miss Harriet Lewin was renewed, his father insisted on their marriage being postponed for two years, and here some valuable extracts are inserted from the diary which Grote kept that Miss Lewin might know his way of life during the early period of their engagement. His readings in political economy continued, and we have such notices as this, "the reasons which hinder capital and labour from equalizing themselves in all trades," "Ricardo's striking and original remarks on the effect of a rise in wages." Miss Lewin similarly kept a record of her daily proceedings for his perusal. Grote notes on one occasion that he has been to the "Crown and Anchor" to hear Coleridge's lecture. After their marriage the young couple had to live in a house adjoining the banking-house, where the close air of the small court seriously affected Mrs. Grote's health, and they lost their only child.

In 1821 Grote began his literary activity by an essay on Parliamentary Reform, expressly directed against

Mackintosh's theory of class representation as set forth in the *Edinburgh Review*. In 1823 we already find him discussing the Greek mythology, but only "to show the entire uncertainty and worthlessness of tales to which early associations have so long familiarised all classical minds." This view he always adhered to, insisting that there was no siege of Troy, "no facts behind the legend," that "the curtain was the picture." The time was not yet come for comparative mythology to show that the fact behind the legend was a certain condition of the human mind, a certain stage of language. In 1826 Grote wrote an article in the *Westminster Review* on Mitford's *Greece*, that author's hatred of Athens and praise of Dionysius and other tyrants who had put down the demos having roused Grote's spirit as it did Thirlwall's. Mitford, it is true, had the great merit of having shown that ancient history was a living thing, and ancient politics really of an intensely modern cast, and hence deeply interesting. The progress of the *History of Greece* was however much checked by other matters in which Grote was at this time engaged, the founding of London University, and the movement in behalf of Parliamentary Reform. In 1830 a short visit was paid to Paris, where he saw Lafayette and became aware of the political crisis then fast approaching in the capital. Grote took a deep interest in the success of the "Revolution of July," which produced such a ferment in the English mind that it was found impossible to withstand the demands for political reforms which existed throughout the nation. Grote was elected M.P. for London in the Reform Parliament, and repeatedly tried to get the vote by ballot accepted—at a later period, after the suffrage had been so largely extended, he thought it less important. It is not till ten years afterwards that we find by his letters to Cornwall Lewis that he is devoting himself to his Greek studies again—this time to Aristotle. He resolved to abandon his unavailing and almost solitary struggle in Parliament, and did not stand again for London. Then came a long tour in Italy, and another visit to Paris, where he sought the acquaintance of Auguste Comte owing to the impression made on him by the *Philosophie Positive*. Grote's efficient help to Comte is well known. In 1846 the first two volumes of the *History of Greece* appeared, and at once made a striking sensation among scholars. Mrs. Grote has printed an interesting letter from Hallam on Homer and the Trojan War. Still the historian retained a most lively interest in modern politics, and the agitated condition of Swiss affairs in 1847 led to his *Letters on Switzerland*. The dissensions between the Cantons appeared to him curiously to resemble those which went on in the old Grecian world, and he travelled to Berne to attend the Diet and see the actual state of affairs; C. Lewis sums up his conclusions thus: "the cause of the mischief is religious bigotry working upon an imperfect federal constitution." The Revolution of 1848 in Paris caused intense anxiety among all true friends of France in England, and Mrs. Grote cannot refrain from adding an explanation of the reason why the Commune was allowed its own way in 1870 while it was put down by the National Guard in June, 1848—the answer being that the genuine civic character of the Guard was destroyed by its later reconstitution which made it a loose, incoherent, undisciplined body. They went again to Paris in 1849, and were very much grieved at the speeches of Tocqueville and other leaders in the Assembly. Tocqueville in advocating the expedition to Rome spoke of "the population of Rome having been coerced by a faction." When Louis Napoleon overthrew the constitution, Grote sums up the conduct of the majority as follows:—"They have been helping, and even outrunning, the President, for the last two years, in crushing everything like public liberty

and the popular force. They have done this without seeing that the popular force formed the only security to themselves as against him, and that as soon as they ceased to have a spirited and free spoken political public under them, they were at the mercy of the executive power, even for their own personal safety! This is a terrible lesson which they are now taught when it is too late. Tocqueville and all the rest of them, in their intense fear and hatred of the Republican party, have been just acting in such a way as to prepare France for that military despotism which now menaces the country."

Meanwhile the history had been progressing volume by volume, and the historian corresponds with Lewis on difficult passages of Thucydides, e.g. on φιλοκαλοῦμεν μετ' εὐτελείας, which he took to mean, "our poorest citizens have a keen relish for fine poetry, eloquence, art, and grace of every kind." Perhaps it would be truer to say that the Athenian loved artistic beauty irrespective of the cost and the material. Shilleto had criticised some of the notes on passages in Thucydides, and Professor Grote of Cambridge replied to his somewhat sharp attack. Colonel Mure also put forth a criticism on the account of the early chronology, but in a much fairer tone. Nor did Grote limit himself to his Greek authors. His fondness for Tacitus and other Latin writers is visible in almost every page. And he would illustrate the views of the early Greek race by reference to Sleeman's account of Oude; and the outbreak of religious feeling at Athens (when the statues of Hermes were mutilated) by the outbreak of fanaticism at Abbeville in France in 1766 when a crucifix was damaged. After another visit to Paris he writes still more despondingly as to the French—"Nothing strikes me more than the excessive alarmism and political cowardice of the French people; no one seems to have an idea that he has any power of defending himself, nor does he think himself safe unless soldiers or gens d'armes are within call." At last the twelfth volume was finished, and "I remember that I had a bowl of punch brewed at Christmas for our little household, in celebration of the completion of the opus magnum; Grote himself sipping the delicious mixture with great satisfaction whilst manifesting little emotion outwardly, though I could detect unmistakable signs of inward complacency as I descanted upon 'the happiness of our living to see this day,' and so forth." It was indeed an "opus magnum," and will remain the political history of Greece, though the works of Curtius and others may prove more attractive in some respects on the side of art and literature. Possibly Grote at one time intended to have written a chapter on Pindar and the lyric poets as a pendant to his account of Athenian literature, and a tribute to the intellectual powers of the rival race, but such a chapter does not exist. The famous chapters on Socrates and the Sophists may have turned his attention to philosophy again, and he resumed the studies of his early years on Plato and Aristotle with great zest. He unfortunately did not complete the account of Aristotle's Political writings, which would have been most valuable to us; the analysis of the Logical works is not perhaps of equal interest to the reader. And possibly Plato ought to be commented on by one who is not an opponent; Grote judges him from the point of view of the opposite school. He accepted too the common Alexandrian list of Plato's works in a somewhat uncritical manner. J. S. Mill writes: "I hope you have seen Mark Pattison's review of you in the *Reader*. He contests the question of the Platonic canon with you, or rather promises to contest it. I was pleased however to find him so eulogistic of the book in every other respect." It is characteristic of the subsidence of the angry political and educational warfare of the days of the Reform Bill that Grote in

his later years enjoyed going to Oxford, which was perhaps a little ashamed of the way it had once treated London University and of its squibs against the Liberal thinkers. Grote's antagonism to the governing classes too, learnt under James Mill, who had suffered from the painful experiences of a very different epoch, had now disappeared, and he enjoyed the society of many of our most distinguished men. He was even offered a peerage, but he refused it on honourable and conscientious grounds, as he "could not perform the public duties incumbent on members of the House of Lords." From another visit to Paris we have an anecdote of M. Thiers, who said to a friend as early as 1869, "My whole life has been passed in antagonism with Republican doctrines—well, for all that, I have of late come to think differently. In plain terms, I am now profoundly persuaded *qu'il n'y a rien de possible que la République.*"

Almost the last work which Grote did was the paper on Aristotle's *De Anima*, which he generously contributed to Bain's book on *The Senses and the Intellect*, and which occupied him for not less than eight months. He was always careless of himself, and twice he caught desperate chills, which were the origin of the insidious malady that proved fatal to him. He died on the morning of the 18th of June, 1871. The abstract we have given supplies only a faint idea of Mrs. Grote's labour of love in writing what is emphatically the *personal life of George Grote*. She has wisely printed as many letters as possible, and very aptly quotes the words used by the biographer of Grote's illustrious namesake, Hugo Grotius—"Ses lettres peuvent être regardées comme des ouvrages. Le recueil que nous en avons est un trésor, non seulement pour l'histoire publique, mais aussi pour l'histoire littéraire." C. W. BOASE.

F. VON RAUMER.

ON the 14th June died at Berlin, at the venerable age of ninety-two years, Friedrich von Raumer, the Nestor probably not only of German but of European historians. He had seen the days of Frederic the Great and of the Emperor William I., and had held a government office under Hardenberg in 1810, until, after the expulsion of the French, he took a chair of history first in the University of Breslau and soon afterwards at Berlin. Though granted a dispensation from lecturing a considerable time ago on account of his great age, he used to assemble his pupils regularly till within a few years of his death. I remember that at a dinner given in February, 1867, in honour of Leopold von Ranke, commemorating the day on which that great historian had taken his degree fifty years before, Raumer commenced a long series of speeches by playfully asserting that he considered himself entitled to do so by having constantly been a grateful disciple of Ranke, though his senior by more than fifteen years. Always cheerful and a warm liberal patriot, he contrived as long as he lived to follow the progress of the age with a keen eye. When in his place as secretary of the Berlin Academy he delivered the annual oration on the birthday of Frederic the Great in 1846, he had to endure a violent retort from King Frederic William IV. and his reactionary court, and in consequence resigned both the secretaryship and his chair in that learned body. Two years later he was elected a member of the Frankfurt Parliament, and went as ambassador of the provisional German Government to that of the French Republic at Paris, where Bastide, the foreign minister of the day, received him sneeringly as the messenger of the Frankfurt Empire. His letters from Paris, however, published by himself, will still be read with pleasure on account of their lively contributions to the history of the revolution of 1848. And so will be the reminiscences of his own eventful life, written several years later in a charmingly gossiping strain. His many historical works are more or less distinguished by a great amount of matter drawn from the archives of the most important European governments, which he had visited during his frequent travels. I refer especially to two volumes of contributions from researches in the British Museum and the State Paper Office, referring to the period of Elizabeth and Mary Stuart and to the reign of Frederic the Great, 1836. Three volumes of letters written home from England in 1835 and 1841 found a translator as soon as the originals appeared. Raumer wrote a rapid and easy style, but neither excelled in terseness nor in a systematic application of his sources according to critical rules. He consequently

never founded a school, but constantly attracted a number of friends and admirers. Of all his works the *Geschichte der Hohenstauffen* in six volumes will certainly be best remembered for a good while to come. Although some portions of that mediæval period have since been revised and reproduced by younger and even more competent historians, nobody as yet has come up to Raumer's general sketch and delineation of that grand age—a work which, indeed, was composed in his best time and style. Hardly a year ago the old man truly enjoyed the issue of a fourth and popular edition, which he dedicated to William I., the restorer of the Empire, with whom he had continually been on the best personal terms. R. PAULI.

Bullettino della Commissione Archeologica Municipale. Marzo-Aprile, 1873. Roma, 1873.

THIS publication deserves to be better known in England than it is at present, and when known it cannot fail to be highly appreciated. It is the first time that an archaeological journal has been issued at the expense of a corporation, and the municipality of Rome has set an excellent example to the corporations of other cities. The *Bullettino* gives an account of the antiquities found from month to month, and the best representations that can be obtained, with the help of photography when necessary. The plates are very satisfactory, and the accounts are written by the best archaeologists of the place. In the present number the first article, by the Baron Visconti, and entitled "Ermeracle," relates to the statues of Hercules, with an illustration of one recently found, of which an excellent photograph is given.

The second article is on the fragments of a colossal cornice found on the Viminal near the Prætorian Camp, supposed to belong to the western gatehouse, which the writer of this article attributes to the time of the Gordians. The plate gives an excellent drawing and section and the plan of the camp showing the exact situation where it was found. There was a previous notice of this cornice in a former number of the *Bullettino*, for November, 1872, to which this may be considered as supplementary. Several of these large fragments were found near the same spot, two quite finished, one unfinished, and one nearly blocked out and the carving not executed at all. All were of the same gigantic proportions and evidently all intended for the same building. The impression left on my mind was that they were on the site of the studio of a sculptor, and that the work was never completed; but that is not the opinion of the writer of this article, who gives a view of the gate to which he supposes them to belong. The third article is entitled "Basorilevivo Mitriaco Scoperto al Campidoglio e Tazza Mitriaca," and is accompanied by an excellent engraving of a fragment of sculpture found on the northern side of the Capitoline Hill during the recent excavations in making a new carriage road up the hill on that side (with a view to the removal of the present road on the southern side which crosses the Forum). There is also in the same plate another representation of the same subject from a terracotta circular basin. The article is an extremely learned one on the worship of *Mithra* or *Mithra* by the Cavalieri C. L. Visconti, who is well known to be master of that difficult subject, and he refers to all the best works upon it, German and French as well as Italian. This is followed by an account of a singular brick stamp of the time of Constantine, by the Cavalieri G. B. De Rossi, full of his usual learning and ingenuity, and accompanied by an excellent woodcut. The next article is by the same author, and relates to another singular inscription on a leaden waterpipe found on the Esquiline, near the great agger of Servius Tullius, between the thermæ of Diocletian and the church of Santa Maria Maggiore.

The fourth plate is a plan of the new road up to the Capitol on the north side, as before mentioned, with clear indications of the exact sites of the objects found there. One of these is the cave of Mithra, another a part of the early wall of large squared stones that formed the substructure against the cliff of the hill. There is an excellent paper upon these and other interesting remains, including several brick stamps, by Signor Lanciani, the excellent and active secretary to the commission. JOHN HENRY PARKER.

Notes and Intelligence.

Two months ago Dr. Pertz, forced by the weight of years and increasing illness, gave up his two important positions, viz. the editorship of the *Monumenta Germaniae Historica* and the governorship of the Royal Library at Berlin. The vacancies have not yet been filled up. We learn, however, on good authority that the *Monumenta* henceforth will not be again entrusted to a single person, but that a Commission of the Royal Academy of Sciences at Berlin is to superintend the continuation of the great collection of authorities for national history. Members of the commission are to be Professor Droysen, the author of the political history of Prussia, Dr. Max Duncker, the first officer of the Prussian Record Office and author of a learned work on ancient history, and Professor Haupt, the well-known philologist. They are expected to attach to their number Professor Wattenbach, who removes from the university of Heidelberg to that at Berlin, and Professor Waitz at Göt-

tingen, both among the first living masters of mediæval historiography and diplomatics. Perhaps Professor Sickel of Vienna, who has investigated the early charters, especially those of the Carolingian dynasty, more scientifically than anybody else, will also be of the number. Since his pamphlet on the *Diplomata Regum Francorum e gente Merovingica*, and since Dr. Stumpf of Innsbruck in the last number of Sybel's *Historische Zeitschrift* (see *Academy* No. 73) reviewed even more severely this last volume of the *Monumenta*, edited by Dr. Pertz, junior, there is no chance left of continuing the editorship in the old rather slovenly way and as a kind of heirloom in the same family.

The hope of inducing H. von Treitschke, the eloquent and patriotic historian of Heidelberg, to accept a chair at Berlin, has not been entirely given up, though he has for the present declined to go. That Waitz would leave Göttingen to fill up a vacancy at Heidelberg is more than unlikely, if not impossible, for many reasons which need not be enumerated here.

A third edition of Wattenbach's very useful book *Deutschlands Geschichtsquellen im Mittelalter bis zur Mitte des dreizehnten Jahrhunderts* has just left the press. Compared with the second, which appeared in 1866, the book has been very much improved and enlarged, so much so indeed that it had to be divided into two volumes, the first of which, just published, reaches only the end of the tenth century. It is at present by far the most popular handbook of all those who wish to approach the study of German and Imperial history with the principal authorities in hand. The wonderful materials of English history, of which Sir Thomas D. Hardy is supplying his magnificent Descriptive Catalogue, very much require some similar condensation and adaptation in connection with mediæval literature and literary progress in general, which certainly would be the task of a good scholar. Wattenbach would serve him fairly as a model.

The first number of A. Potthast, *Regesta Pontificum Romanorum inde a post Chr. n. MCXCVII. ad A. MCCCIV.*, Berlin, Decker, 1873, 4to, appeared a little while ago, a work for which the great prize of the Berlin Academy of Sciences has been awarded. It will be remarked that this collection in continuation of Jaffé's well-known *Regesta Pontificum* commences with Pope Innocent III., considerable fragments of whose register have happily been preserved, which were printed long ago, some portion by Baluze, and another by Bréquigny. A glance of the eye, however, suffices to see what a large mass of documents, once issued from the chancery of this great pontiff, but not contained in either of those editions, may still be gathered by skilful researches.

The German book-trade advertises likewise : A. Potthast, *Bibliotheca Historica Mediævi*, Editio Secunda, Weber, Berlin, to be issued in the course of the summer. This work is sure to be welcomed by many a friend of historical inquiry in England as well as on the continent.

Another instalment of Spruner-Menke's historico-geographical Atlas has been received by the subscribers with a map of the British Isles between the years 1485 and 1830, before railways began to intersect the turnpike roads and canals (No. 61), to which a very instructive sketch of the border land between England and Scotland is appended.

Last not least, a German translation of Mr. James Bryce's excellent book on the Holy Roman Empire by Dr. Arthur Winckler, Leipzig, Ed. Kummer, 1873, ought to be mentioned. It has been revised by the author himself in harmony with a fourth edition of the original soon to be published. Mr. Bryce's German preface concludes with some graceful and warm-hearted compliments to the new empire. In the translation, which reads very well indeed, and which has been received accordingly by a rather sober and critical press, the notes and the chronological tables of popes and emperors have been transferred to the end of the text, a new arrangement which scholars generally do not prefer.

New Publications.

ARCHIV f. sächsische Geschichte. Hrsg. von K. v. Weber. 12 Bds. 1 Heft. Leipzig: Tauchnitz.

CARTWRIGHT, W. C. On the Constitution of Papal Conclaves. Edmonston and Douglas.

CAYRE, M. l'Abbé. Histoire des évêques et archevêques de Toulouse, depuis la fondation du siège jusqu'à nos jours. Toulouse: Douladoure.

COLLECTION de Documents, Mémoires, et Correspondances relatifs à l'histoire de l'Empire de Russie. 10 vols. St. Petersburg: Devrient.

DE REKENINGEN DER STAD GENT. Tydvak van Jacob van Artevelde, 1336-1349. Gent: Hoste.

DORN, B. Collection de Monnaies Sassanides de feu le Lieutenant-Général I. de Bartholomæi, représentée d'après les pièces les plus remarquables. Leipzig: Voss.

DUMESNIL, A. J. Histoire de Jules II., sa vie et son pontificat. Paris: Loones.

FITZPATRICK, W. The great Condé and the Period of the Fronde. Newby.

FREMY, E. Diplomates du temps de la Ligue, d'après des documents nouveaux et inédits. Paris: Dentu.

GLUCK, Chr. F. v. Ausführliche Erläuterung der Pandekten nach Hellfeld, fortgesetzt v. Chr. F. Mühlenthal u. E. Fein, und, nach deren Tode, von K. L. Arndts v. Arnesberg. 47 Thl. 2 Abth. Erlangen: Palm und Euke.

HISTORIAE Patriae Monumenta. Tomus xiii. Codex diplomaticus Langobardiae. Turin: Loescher.

INNES, Prof. C. Scotch Legal Antiquities. Edmonston and Douglas.

KÜRSCHNER, Dr. F. Die Urkunden Herzog Rudolfs IV. von Oesterreich (1358-1365). Ein Beitrag zur speziellen Diplomatik. Wien: Gerold's Sohn.

MARIANO, R. Roma nel medio evo. Turin: Loescher.

MAS LATRIE, L. de. Nouvelles preuves de l'histoire de Chypre sous le règne des princes de la maison de Lusignan. 1 re. livr. Paris: Baur.

REUSCH, Dr. H. Luis de Leon und die spanische Inquisition. Bonn: Weber.

ROLLS OFFICE CHRONICLES. Materials for a History of the reign of Henry VII., from Original Documents preserved in the Public Record Office. Edited by the Rev. W. Campbell, M.A. Longmans.

SATHAS, C. Μεσαιωνική Βιβλιοθήκη. Bibliotheca Graeca mediævi. Tomus ii. Contenant les Chroniques de l'île de Chypre et une dissertation sur les monnaies des rois francs de Chypre, par P. Lambros. Paris: Maisonneuve.

SCHMUEDE, L. Maria Theresia, 1740-1780. Klagenfurt: Bertschinger.

SÉGUR, Comte de. Histoire et Mémoires. (Ouvrage Posthume.) Paris: Firmin Didot.

WALTHER, Ph. A. F. Die "grosse Landgräfin." Landgräfin Caroline v. Hessen. Ein Lebensbild. Darmstadt: Brill.

Philology.

A Sanskrit-English Dictionary; Etymologically and Philologically arranged with special reference to Greek, Latin, Gothic, German, Anglo-Saxon, and other cognate Indo-European languages. By Monier Williams, M.A. Oxford: Clarendon Press. 1872.

THE chief object which Professor Williams has had in view in preparing his dictionary is to compress into the compass of a single convenient volume the main results hitherto obtained from the lexicographic and exegetic labours of Sanskrit philologists. Such an undertaking, if carried out satisfactorily, must needs confer a very great benefit alike on Sanskrit students and on those engaged in comparative philological inquiries. The want of a work of this kind has indeed been long felt. Professor Benfey's Sanskrit-English dictionary, published in 1866 and consisting of a very handy octavo volume, has no doubt proved extremely useful; the more so as, in spite of its comparatively limited bulk and matter, the author has added references to the greater part of the meanings of words he proposes. Still, though probably including all that the generality of students are likely to require, the volume did not pretend to be more than a kind of manual to a number of works generally used as text-books in junior and middle university classes. Vaidik literature, which is of the greatest interest and importance to comparative philologists, had to be almost entirely excluded. The work of Professor Williams, on the other hand, aims at far greater completeness, as is shown by the copious list of authorities given in the preface, including all the chief editions of Vaidik works and law-books, the epics and the more important works in other departments of classical literature. The statement that "all the mere texts and manuscripts" consulted or drawn upon for information have been excluded from that list, has probably surprised many scholars. For completeness this work would thus have to be compared rather with the great St. Petersburg Sanskrit-German Lexicon of Professors Böhtlingk and Roth, an appeal to which, as the author acknowledges, has always proved "the most satisfactory available means for deciding doubtful questions." A rough calculation of the relative amount of printed matter contained in the two works shows that the St. Petersburg Dictionary, which, when complete, will probably number some 9,000 columns or

4,500 pages, would, if printed in the same close, but distinct, type as that of Prof. Williams, occupy about 2,500 pages, or two volumes not considerably exceeding the bulk of the present volume. Those who are accustomed to consult the German Lexicon, and are, therefore, aware of the vast number of quotations which have been introduced therein to authenticate every meaning assigned to a Sanskrit word, may perhaps find it somewhat difficult to realize this statement. They will, however, on examining the Oxford dictionary more closely, meet with much that is calculated to take up considerably more space than has been assigned to the same matter in the larger work. One feature which is peculiar to Prof. Williams' volume consists in numerous articles, compiled from various sources, and scattered throughout the work, on the literature, mythology, science, and philosophy of the Hindus. The information conveyed in this manner will no doubt prove very useful to the student. Much room is also taken up by an unusual superabundance of the English equivalents of Sanskrit words which, it is to be hoped, will at least save the use of an English dictionary of synonyms to those who venture on poetical translations of Sanskrit originals. Under the word *prāṇīya* for instance the St. Petersburg dictionary quotes five passages for which two German equivalents are considered sufficient, whereas Prof. Williams gives *seven* synonyms.

This dictionary possesses, however, several more conspicuous characteristic features which, as innovations in Sanskrit lexicography, will have to be well considered by those who will hereafter engage in a similar undertaking. The first point to be noticed is the introduction into the alphabetical arrangement of an almost unlimited number of compound words.

"Sanskrit," according to Prof. Williams, "stands eminently forth as the grand typical representative of the whole Aryan line of speech which is throughout distinguished by its love of composition. To exclude compounds from a Sanskrit lexicon would be, so to speak, to 'Unsan-skritize' it. Not only are there certain compounds quite peculiar to Sanskrit, but in the grammar composition almost takes the place of syntax," &c.;

and further on we meet with the following remark:—

"All must agree that as Sanskrit exceeds every other language in its infinite capacity for composition, no Sanskrit lexicon, if it admits compounds at all, ought to treat them as if they were independent entities entitled to a separate existence of their own."

Nobody will probably feel disposed to contest these views, except in so far as it might be urged that a compound the members of which have lost their separate and distinct meanings has certainly a right to be treated as an "independent entity," and as such to appear in its alphabetical order. But so far from the remarks quoted being a vindication of the system adopted in the Oxford dictionary, they would seem to be the very grounds on which a vast number of the compounds exhibited should have been rejected. No doubt the St. Petersburg Lexicon contains a still larger amount of such combinations; the great mass however of these find no place there among the alphabetically arranged words, but *because* "in Sanskrit grammar composition almost takes the place of syntax" they merely appear as so many quotations from Sanskrit works to illustrate the meanings of certain words forming part of these compounds. Does not the very fact of such combinations being exhibited alphabetically only, tend to their being considered as "independent entities entitled to a separate existence of their own"?

It is, however, evident that the majority of compounds admitted by Prof. Williams are really quotations in disguise—quotations, be it remarked, without references—which serve, as he himself tells us, "to illustrate the use of a leading word" "to which they have always been subordinated." But what claim, it may be asked, can the first

member of a compound in such a language possibly possess to being thus exceptionally treated? Are not the cases even more numerous when certain meanings of words can only be adequately illustrated by compounds of which those words form the *last* member? Not that I would advocate the principle followed by Prof. Benfey of giving compounds almost invariably under its last member; although those he has admitted are comparatively much more limited, and generally of a more useful and indispensable order. But surely no student ought to be encouraged to look for such a compound as *Yudhishtira-purogama* under *Yudhishtira* where Prof. Williams places it. Can this be said to have been done in order to illustrate the use of the leading word; and why not give *śalyapramukha* and a host of similar combinations in their respective order? Are not compounds such as *ārya-prāya*, *trina-prāya*, *supta-jana-prāya* useful illustrations only when exhibited under their last element? In my opinion the indiscriminate introduction of ready-made compounds into a Sanskrit dictionary constitutes a very serious danger to the effectual philological training of the student; and the momentary convenience afforded thereby is sure to turn out to have been only too dearly bought. Again, if anything like consistency is deemed desirable in a work of this kind, a vast number of such combinations could have been with advantage dispensed with. A few days' reading will furnish compounds by thousands which have an equal, if not a better, right to be admitted with many that have been given. The dictionary has *pīna-sroni-pāyodharā* and *srastottara-pāta*; why not *pīna-skandhorubāhu*, *srastakiritahāra*, *visrastahārāṅgadachakravāla*, &c., &c. It contains *ari-rāshtra*, *ari-pura*; why not *ari-mandala* (Ragh. iv. 4)? We meet with *pāshāna-chaya-nibaddha*; but Profs. Böhtlingk and Roth under *badh* with *ni* furnish a score of compounds with *nibaddha*, many of which will recommend themselves even more strongly. Prof. Williams admits *drutatara-gati* from Megh. 20; why not *laghugati* (ib. 16)? he gives *kṛita-sannidhāna*; why not *parikalpita-sannidhi* (Ragh. iv. 6)? Would not a compound such as *un-nayana-pankti* (Ragh. iv. 3) be far more useful, as the student might naturally be led to refer it to the *unayana* given in the dictionary? In Prof. Williams' opinion, "when a student is in doubt whether to translate compounds like *indra-sātru* as *bahuvrīhis* or *tatpurushas*, the dictionary is surely bound to aid in clearing up his perplexities." Whether the compiler of a dictionary is bound to, or could by *any possibility*, undertake such a task, I must leave to the decision of those skilled in lexicographic research; but the word quoted by Prof. Williams can scarcely be called a felicitous illustration; since, if it proves anything, it is that, in order to clear up some of the student's perplexities, he ought to have marked the accents of Vaidik words. He has indeed gone so far as to enlighten the student on this particular word by explaining it to mean "whose enemy or conqueror is Indra, conquered by Indra (with the udātta on the first syllable; differently accented the word might mean 'an enemy of Indra');" but are there not many other cases in which information of this kind would be quite as useful? Should not, for instance, the noun *āpas*, work, be distinguished in a dictionary from the adjective *āpas*, active?

The alphabetical order of words has been partially abandoned by Prof. Williams for a kind of etymological arrangement. From the preface to the second edition of Wilson's dictionary it appears that it had been the intention of that scholar to offer to the public "a work constructed on an entirely different model, and one better adapted than a mere alphabetical compilation to learned and philosophical research." The plan alluded to consisted, as we now learn from Prof. Williams, in a re-arrangement of all the words

under roots, according to native principles of etymology, with numerous references added to them. The task of preparing a dictionary on the plan sketched out by Wilson was not, however, given up entirely, but was in later years entrusted by him to Prof. Williams, to whom he likewise made over "a copious selection of examples and quotations made by the Pandits of Calcutta, under his direction, from a considerable range of Sanskrit literature." On the other hand, the late Prof. Goldstücker, as is well known, undertook to bring out a third revised edition of the Alphabetical Sanskrit Dictionary. But as it soon became manifest to Prof. Williams that the last-named work "was assuming almost interminable proportions," and that the St. Petersburg Wörterbuch also "appeared to expand into vast dimensions,* so as to be quite beyond the compass of ordinary students, he suddenly determined to abandon the design of a wholly root-arranged dictionary—which could only be useful, like the works above-mentioned, to the highest class of scholars—and to commence a work on a more practical plan." There can be no doubt that a dictionary arranged etymologically throughout, though useful to a certain class of scholars, would have been of little practical use to the Sanskrit student unless an alphabetical index of almost the entire stock of Sanskrit words were added to the work for reference. Whether, however, the middle course followed in the Oxford dictionary will, as Prof. Williams thinks, satisfy the requirements both of philology and of ordinary practice, is by no means unquestionable. Can it really be said that the comparative student gets a satisfactory "synoptic view" of the various "family groups" of Sanskrit words when *bhava* (and the partic. *bhavat*; p. 702) and *bhāva*, &c. (p. 707), are separated from the root *bhū* (p. 714); when the group given under root *bhuj* (p. 713) includes *bhoktri*, but neither *bhoga* nor *bhoja* (p. 723)? What can be the principle on which *sodha* (the alphabetical order of which would be in p. 1021) is placed under *sudh* (1014); on which *teja* and *tejas* (p. 383-4) are not given under *tij* (p. 373); though *kīrti* (which alphabetically would stand in p. 231) is placed under *kṛt* (p. 252). Cases of this kind of inconsistency are not isolated, but are to be met with on almost every page.

Not less difficult is it to ascertain the exact class of Sanskrit students, whose convenience this arrangement is likely to serve. The dictionary does not, nor is it intended to, satisfy the requirements of the advanced student. Without references no scholar can be expected to accept meanings another may choose to assign to Sanskrit words. In numerous cases a certain meaning of a word rests on one or two passages which may either be corrupt or bear a different interpretation. To mention a few examples from common text-books. When Prof. Williams tells us that *anvāsita* means "made to sit down after or alongside," a reference is needed; for if this interpretation is meant to apply to Ragh. i. 56, it can hardly be the right one, and is certainly not borne out by the comment. When *āroṇyamāna* is said to mean "being strung, being tried to be strung," the student requires to be told whether he is thus to translate the word in a certain passage of the Mahābhārata (i. 7032), where the commentator (and Prof. Johnson) takes it in an active sense, "stringing, wishing to string." If *sahasā* means "with," does this rest on Mah. i. 7011 alone? If so, the meaning is doubtful, as Prof. Benfey in his dictionary has done well to indicate. Under *anantaraja* it might have been stated that Kullūka's explanation of the term (M. 10, 41) differs from that given in the dictionary. When *riksha* is said to mean "the seven

stars, the *Pleiades*," this is probably a mis-translation of Messrs. Röhrling and Roth's "Siebengestirn," which in German is the common designation of the Pleiades, but is in this case applied more correctly to *Ursa major*, as it might of course be used for any constellation consisting of seven stars. To the ordinary Sanskrit student the arrangement of the dictionary will, I fear, be far from convenient. While offering too little to the comparative philologist, it exacts from those it is to assist in toiling through the common run of texts far too great a knowledge of the stock of roots and the formation of Sanskrit words. With them looking for a word will often be a matter of "hide and seek." Can the student be fairly expected to know that in order to find the proper noun *dāmodara* he has to look for the particular word *dāman* (one of three) which belongs to one among five identical roots, viz. *dā* "to bind"? Where a word may have been omitted in the dictionary the conscientious student will hunt for it, column after column, and in giving up the search will mistrust his own discernment rather than suspect a mistake on the part of the compiler of the dictionary. Thus a student desirous of reading the fourth book of the Raghuvamśa was sorely puzzled where to find the word *pradhūmita* occurring in the second verse. For these and other reasons the alphabetical order can scarcely be dispensed with in a Sanskrit dictionary which is to benefit the ordinary Sanskrit student. Still, there is no reason why lists of derivatives should not be added to the roots and even to primary bases. This would be decidedly useful, and could hardly be considered to involve an increase of bulk where space might have been economized in so many ways. What occasion can there be for giving in the alphabetic order so great a number of participles and gerunds, often explained by a profuse display of English equivalents which naturally follow from the meanings of the roots? And why should *ānamita*, *ānamya*, *ānāmya*, *unnamita*, and *unnamaya* be thus admitted, whilst *avanamita*, *avanāmita*, *avanamya*, *avanāmya*, *ānāmīta*, *unnāmīta*, *unnāmīya*, *unnamya*, &c., are excluded?

The amount of space accorded to such verbal forms is the more considerable on account of another prominent feature of Prof. Williams' dictionary, viz. that of separating from the simple roots their combinations with prepositions and introducing them into the alphabetical arrangement. Prof. Williams asks "why Sanskrit lexicons should not have been brought into harmony with Greek in this respect long ere this." But has such an innovation ever been thought desirable in the interest of philology or even as being more convenient to the Sanskrit student? The transparency of Sanskrit formation has enabled the philologist to trace the chief primary elements of Indo-European speech in those simple combinations of sounds expressive of certain general conceptions: why should anything be devised that might tend in any way to obscure this fact? The Greek lexicons exhibit the first person singular of the present tense: but surely, if any change were thought possible and advisable to bring the two languages into harmony in this respect also, it would not be in Sanskrit. Even in dictionaries of dialects which are intimately connected with Sanskrit, but have undergone much decomposition, such as the Pāli, it would probably be impossible to copy in every particular the model of Sanskrit formation—for who without committing gross injustice could assume *rājan* to be the base of a word which has *rañño*, *rājassa*, and *rājino* for genitives?—and the adoption of the Sanskrit root system, however convenient to Sanskrit scholars, may possibly be outweighed by inconveniences of other kinds. Another manifest advantage of the method hitherto followed in Sanskrit dictionaries is the

* See however what has been said above.

"synoptic view" we thereby gain of a verb and its combinations with prepositions; while at the same time considerable space is saved by getting rid of a continual repetition of grammatical forms. No doubt the labour involved in this process of re-arranging the verbs must have been very great; the more so as the assistance which Prof. Williams has derived from the work of Profs. Böhtlingk and Roth must, from the very beginning, often have failed him in this respect. Take, for instance, the root *nam*. The fasciculus of the St. Petersburg dictionary containing that verb with its compositions was published some ten years before Prof. Williams' work. The native authorities state that in the causative form this root may optionally lengthen its vowel, but, when used with a preposition, must remain short. Prof. Williams, however, under *nam*, states the rule thus: "caus. *namayati* and (with prep.) *nāmayati*." In turning to its compositions, we find, in accordance with this view, the causatives *ava-nāmayati*, *ā-nāmayati*; but with *ud*, *un-namayati*: yet Messrs. B. and R. had furnished examples of both the short and long vowels for each of the three verbs. With *sam*, *vi*, &c., Prof. Williams, in conformity with his predecessors, gives both forms. The only conclusion we can draw from such a comparison is that the printing of the Oxford dictionary must have begun many years ago. A few remarks on this point would have explained why, for instance, the causatives of *adhi-vas* and *ni-vas*, to which Messrs. B. and R. assign four and three different meanings respectively, are entirely wanting.

One more peculiarity of Prof. Williams' dictionary remains to be noticed: the partial employment of the Roman character with diacritical marks. On this point the preface contains a lengthy digression characterized by the most sanguine expectations as to the gradual propagation and eventual supreme rule of our alphabet, together with various contrivances of stops, points, and other marks. There may not however be wanting those to whom the adoption among European scholars of a common transcription seems a dream less likely to be realized than the reunion of the various Christian sects. All that can be said at present is, that almost every Sanskrit scholar employs his own peculiar system of transliteration; nay, that most of them have at various times made use of two or three different systems, and may be prepared to invent and adopt a fresh one at a moment's notice. Those who read Prof. Williams' remarks will probably remember that a different method of transcription is used in his Sanskrit grammar; and being told that, if he "had dared to innovate further," he would have written *k'* for *kh*, &c., they may be pardoned for being less confident on the matter. Many of those, however, who have the extension of the "Indo-Romanic" alphabet at heart must have been surprised to see that, in spite of the varied resources of our typography, such as capital letters, italics, "to say nothing of Egyptian and other forms of European type," Prof. Williams has chosen to employ the Devanāgarī character in order to bring prominently before the eye the roots and the leading words of groups of derivatives. This continual change of the two kinds of type can hardly be said to have a beneficial effect on the eye in running over the pages. Many also will probably object to the use of the Roman character in a dictionary as being far from convenient as long as so many different systems of transliteration are in vogue. In consulting the dictionary whilst reading a text printed according to any of those systems, the Devanāgarī form of the word will still readily suggest itself to the mind's eye; but in so doing, to have to translate, as it were, from one method of transcription into another is very far from pleasant. If it is considered too great a trouble for the general student to master the "intricacies" of the

native character, by all means let the European, in what transcription soever, be printed along with the Nāgarī word; but let the latter stand first for him who requires the dictionary in reading Sanskrit texts. That the Nāgarī takes up more space remains still to be proved; but even if it were so, ten times the amount of space might be saved by omitting the numerous *pūrva-padas* of compounds, not to mention other expedients. If one point seemed of late to have been generally agreed upon in transcribing, it was that of marking long vowels with the circumflex, since the horizontal line has to be used for prosodial purposes and the accent is required for Vaidik words. Evidently, however, this also is as much as ever a matter of choice, since in the dictionary the horizontal line has again been made use of by Prof. Williams, whilst in his grammar the accent is used for the same purpose. In order to show that a Sanskrit-English dictionary gains in clearness of arrangement by freely using the Roman type, it is hardly fair to compare this dictionary, as Prof. Williams does, with that of Sir Rādhākānta Deva, a work wholly in Sanskrit and printed in the Bengali character: Wilson's dictionary and the St. Petersburg one will readily bear a comparison in this respect.

Prof. Williams has introduced into his dictionary abundant comparisons from cognate languages, on the authority of Bopp and Profs. Benfey and Curtius, "subject to the understanding that more recent views have been propounded on many points."

In concluding these remarks it is but fair to add that, whatever may be the opinion regarding some of the principles on which this dictionary is based, there can be no doubt that the meanings of the words have been admirably arranged, and that a great amount of labour, and that of the most useful kind, has been bestowed on the work. A second edition, which may probably become necessary after the completion of the St. Petersburg Lexicon, might with comparatively slight trouble be made all that the English Sanskrit student is likely to require.

J. EGGEING.

Notes de Critique et d'Exégèse sur Horace. Sixième Satire du premier livre, par P. Willems. Bruxelles. 1873.

THIS brochure analyzes a difficult satire and propounds some new interpretations of it. Critically speaking it is more interesting as exhibiting side by side the numerous opinions of old and new commentators than convincing in the views which the author himself adopts. M. Willems observing that Horace, after first stating that Maecenas differs from the people in not estimating men by the nobleness of their birth, selects as an example Laevinus, a worthless aristocrat who had been rejected in the comitia by the people; and then immediately afterwards (vv. 19, 20) declares that the same people, if they had to choose between Laevinus and a *novus homo*, would prefer the former; seeks to remedy these contradictions by punctuating with Prinz and Dziatzko after *licuisse*.

"Contra Laevinum, Valeri genus, unde superbus
Tarquinius regno pulsus fugit, unius assis
Non unquam pretio pluris licuisse. Notante
Iudice quo nosti populo, qui stultus honores
Saepe dat indignis, qui famae servit ineptus,
Qui stupet in titulis et imaginibus, quid oportet
Nos facere a vulgo longeque remotos?"

Notante introduces an opposition, "Mais quand c'est le juge que tu connais qui nous apprécie, ce peuple stupide . . . alors que convient-il de faire à nous autres, que le vulgaire repousse loin, très-loin?" It would, we think, be impossible to find a more violently harsh interpretation: *Notante* loses its proper meaning of censure, and a sense is given to a

vulgo longe longaque remotos which is without parallel in Latin. M. Willems however, satisfied with the logic and not distressed by the Latin of his interpretation, proceeds to alter *esto* into *est : ei*,

"Namque est : ei populus Laevino mallet honorem
Quam Decio mandare novo,"

which he thus explains : "Et en effet, cela ne souffre aucun doute, le peuple préférerait confier une magistrature à ce Lévinus plutôt qu'à un *homo novus*." Whatever may be said of this correction on palaeographical grounds, we are confident that no one will accept it on that and its logical merits : to say nothing of the extraordinary sense thus given to *est*, Horace, we may feel sure, would not begin a clause with the unemphatic *ei*, even if, which is very doubtful, he allowed it to be scanned as a monosyllable.

M. Willems has another correction, v. 122,

"Ad quartam iaceo, post hanc vagor aut ego lecto
Aut scripto quod me tacitum iuvat unguor olivo,"

he reads *lego* for *ego* : this is at least ingenious, though not much in the ordinary manner of Horace.

The discussions which the author introduces are interesting and good ; that on the vexed line

"Ibant octonis referentes Idibus aera,"

though it does not prove that the other reading

"Ibant octonos referentes Idibus aeris,"

was what Horace wrote, makes it probable ; at the same time that the supporters of the other view are not bound to give up to M. Willems' arguments their interpretation of Martial's epigram x. 62 as indicating a four months' vacation, or at least a vacation which began in July and ended in October.

M. Willems' view that the sixth satire, which in our MSS. follows the journey to Brundisium, was written in consequence of the jealousies roused by Horace's intimacy with Maecenas as shown by that journey, is plausible : and if he is right in concluding that the date of the satire is 718, when Horace was in the 29th year of his age, it may well be that the poet wrote it partly as an answer to those of his friends who had urged him to stand for the quaestorship, which was now open to him, as having attained the *aetas legitima*. This certainly gives a point to the repeated allusions to the *latus clavus* and *calceus*, those marks of senatorial rank to which the quaestorship was the natural mode of entry : as well as to the language of the two last lines,

"His me consolor victurum suavius ac si
Quaestor avus pater atque meus patruusque fuissent."

The view is, we believe, original, and, like all other points connected with Horace's personal history, interesting.

R. ELLIS.

Correspondence.

To the Editor of the ACADEMY.

SIR,—A paper of mine was read in November last before the Society of Biblical Archaeology entitled "A T conjugation such as exists in Assyrian shown to be a character of early Shemitic speech, by its vestiges found in the Hebrew, Phœnician, Aramaic, and Arabic languages." By Richard Cull, F.S.A. The paper will be published in the forthcoming volume of the *Transactions* of the Society, but a few copies of it have been struck off for my private use. Mr. T. K. Cheyne has somehow obtained sight of a copy, and has written an article upon it, which appeared in the *Academy* on the 14th June. The aim of my paper is to show that certain well known, but exceptional forms, hitherto unsatisfactorily explained, in the Hebrew and its cognate dialects, are vestiges of a T conjugation such as exists in Assyrian. A new explanation of these forms by the application of a comprehensive principle is a subject likely to interest Shemitic scholars. The difficulty of rightly

interpreting facts is well known both to students of nature and to literary men, and therefore my interpretation is a fair subject for discussion. Mr. Cheyne begins his article by a charge of injustice against me, but for which I should have allowed his misrepresentations to pass into oblivion. I claim to justify myself from this charge.

It is a known historical fact that the earliest announcement that "the medially augmented forms" in the Assyrian must constitute distinct conjugations was made by the late Dr. Hincks in the *Journal of Sacred Literature* in April, 1856, p. 153 ; and that Dr. Oppert's forms and nomenclature of them were published in 1860. These dates are important, because they prove the impossibility of an explanation of the forms, as I have explained them, before the year 1856. In the year 1868 the Assyrian Grammar of M. Menant was published, and also the second edition of that of Dr. Oppert, and both grammarians state the T conjugation to be peculiar to the Assyrian. Now if my view had been proposed by any scholar before the publication of those grammars, it is obvious that those eminent men either would not have made those statements, or else would have justified them. Mr. Cheyne misrepresents the doctrine of the T conjugation in Assyrian, or he attributes to me the maintenance of one differing from what is accepted by Assyrian scholars—"By a T conjugation he (Mr. Cull) means a secondary verbal form, produced by the insertion or prefixing of a T." This statement is simply untrue. My doctrine is that accepted by Assyrian scholars as laid down by Drs. Hincks and Oppert, and which is briefly stated at the opening of my paper. The medial augment consists of a T, or of a syllable beginning with T, which is inserted between the first and second radicals, but in concave stems it is prefixed to the first radical. This is very different from the doctrine attributed to me and to other Assyrian scholars by Mr. Cheyne.

The doctrine of the T conjugation as laid down by Hincks, Oppert, and Menant is true as far as it goes, and being accepted by Assyrian scholars is taken as the basis of my paper, but it does not embrace all the known facts. Other than concave stems have the T prefixed ; such stems abound in Hebrew, but not in Assyrian, and in treating of those stems I have named my friend Mr. Sayce as the only writer on Assyrian grammar who has drawn attention to them. This reference to Mr. Sayce is stated by Mr. Cheyne to be "strangely inaccurate." Again Mr. Cheyne's statement is simply untrue. Mr. Cheyne is evidently a careless reader, so that he misunderstands what is written, and a man who misunderstands may unwittingly misrepresent. He calls me Dr. Cull, but the title of Dr. is not on my title-page, and has never been adopted by me. He carelessly read my name and misrepresents it. He calls me a blind idolator of Fürst, but he has read so carelessly as to be unaware that I have differed from Fürst in almost every quotation from him. Mr. Cheyne says that I promised an "investigation into all the Semitic dialects" : this again is simply untrue, and doubtless due to his careless reading. Mr. Cheyne says, "The pointing of the Hebrew is occasionally faulty ;" if so, it is a less scholarly blemish than writing עשרה for עשרה which my censor has done. I have now done with Mr. Cheyne, and trust that in future he may read carefully and endeavour to understand the work he desires to write upon before he puts pen to paper.

RICHARD CULL, F.S.A.

25th June, 1873.

To the Editor of the ACADEMY.

SIR,—I have no wish to provoke further misunderstandings, and will therefore be as short as I can in my reply. I trust Mr. Cull may some day come to know me better. Allow me to remark that in the article referred to I expressly recognised his merits as a developer, though not (here at least) as a discoverer, and that I am not unaware of his high attainments as a linguist. It is due however to myself to state that my criticisms, whatever be their value, were made after a most careful perusal of the essay, and that I still adhere to them in substance. I will touch upon each of the points raised by Mr. Cull in order.

I. Writing with but few books about me, I am unable to verify Mr. Cull's references to M. Oppert and his follower M. Menant. I can only say that if they have asserted this kind of "conjugation" to be peculiar to

Assyrian in the natural sense of Mr. Cull's essay, they have made a slip of which the veriest tyro ought to be ashamed. 2. All compendious statements are liable to be misunderstood, but I do not see that mine (as to the meaning of T "conjugations") is dangerously so, or that it misrepresents the received opinion of Assyriologists. 3. Let any one read the passage in Mr. Cull's essay relative to Mr. Sayce's Assyrian Grammar, and decide. My statement was made deliberately, and I am quite at a loss to understand how any other view of the passage is possible. Of course I admit Mr. Cull's explanation of what he intended to say, though I fail to reconcile it with another passage quoted by me in my article from page 17 of the essay. 4. It seems to me that the greater part of Mr. Cull's philological material in this essay (except of course the Assyrian) is derived from Fürst, and very many scholars will agree with me in regarding what proceeds from Fürst with some suspicion. And I cannot help thinking that Mr. Cull's deductions from that material are more influenced by Dr. Fürst than he is himself aware. Still I wish it had occurred to me to substitute for "*blind idolatry of*," which now seems to me several shades too strong, the milder expression "*undue respect for*" (Dr. Fürst). 5. I hardly think the phrase "*all the Semitic dialects*" could have been misunderstood by any one who had read my first sentence. "*All the dialects*" of course means all those which are known well enough for the purposes of the inquiry. That the treatment of Phœnician, Aramaic, and Arabic (including, as it is fair to do, Ethiopic), at least, is perfunctory, will hardly, I imagine, be denied. 6. Mr. Cull forgets to add that I expressly attributed the occasional mispointings to his printer; why does he not extend the same courtesy to me in a more trivial because more obviously accidental instance? 7. I am sorry I was misinformed as to Mr. Cull's titles. It is curious that Mr. Cull should style M. Jules Oppert (as I think that eminent scholar always writes himself) Dr. Oppert.

I am tempted to add, I have done with Mr. Cull, but I trust on the contrary to derive much instruction from his future researches. I will only express the hope that he may add to his other specialities these two—the power of expressing his own meaning correctly, and a trifle more modesty.

T. K. CHEYNE.

Notes and Intelligence.

It is a proof of the zeal with which philological studies are now pursued in Leipsic, that a mere exercise for a doctor's degree should have developed into such a thorough and scholarly treatise as the *Studien üb. Indogermanisch-semitische Wurzelverwandschaft* (pp. 119), by Friedrich Delitzsch. It opens, as a German dissertation is bound to do, with a historical sketch of previous researches into the affinities of the Indo-Germanic and Semitic languages, beginning with Guichard (1606), Thomassin (1697), and Court de Gébelin (1774). But such a number of suggestive criticisms are incorporated into it—we may mention especially those on Ascoli, R. v. Raumer, and Renan—that even an English reader forgots his customary impatience of a sometimes injudicious exhaustiveness. The method and the object are defined more precisely in the next section. The true starting-point for all comparisons of the two families of languages is the primitive speech. We must go back to the time when there was but one Indo-Germanic and one Semitic language, and inquire (1) whether the grammatical systems of the two primitive languages, in spite of their deeply-seated differences, cannot have grown out of one common germ, and (2)—the point on which the solution of the problem depends—whether there is not a sufficient number of common roots, which exclude every other explanation of their agreement, to convince us of the affinity of the two families of language. The grammatical question is but cursorily treated, but the apparent inconsistencies of M. Renan in his *Histoire des langues sémitiques* are placed in a clear light. It should be added that Assyrian and Egyptian researches are dispensed with by our author as unfruitful for the lexical part of the problem. In the third section, the writer proceeds to an investigation of "roots," carefully defining the sense in which he uses that word. The difficulties of comparing Indo-Germanic with Semitic roots are fully admitted, but shown to be not insuperable. Roots with one and with two consonants, and even roots with but one vowel, are, according to the writer, obtainable in both linguistic families. The root-determinatives of the one are then compared with those of the other, and shown in not a few cases to be the same. Five reasons are given for rejecting Fürst's and Franz Delitzsch's theory of prepositional prefixes. Thus the possibility of Indo-Germanic and Semitic root-affinities is established to the writer's satisfaction. To convert this into a reality, a comparison of Indo-Germanic and Semitic roots is instituted, based upon fixed

phonetic laws, which are embodied in a comparative table on p. 82. Dr. D. contents himself with establishing the two first laws relative to the *k* and *g* sounds. If his main results are approved, he is prepared to carry his researches further. At present he offers us 100 roots (a number which, he says, might easily be increased) which as well in their sounds as in their fundamental significations agree to such an extent in both fields of language that even, if single comparisons should have to be abandoned, yet on the whole a mutual relation must be recognised, which excludes the possibility of accident. We refrain, unconvinced as we are, from a criticism, which at the present moment could only be fragmentary, and content ourselves with emphasizing the fact that the inductive method has been applied by Dr. Delitzsch the younger with greater firmness than by any of his numerous predecessors.

We learn from the *Jewish Chronicle* that the first part of a commentary on the Talmud may be expected from the pen of the most venerable of Talmudists, Dr. Frankel, of Breslau.

The comparative statistics of the German universities during the current summer term show the same increase at Leipzig and a further falling off at Berlin, the former being attended by more than 3,000, and Berlin by considerably less than 2,000 inscribed students. Places, too, like Bonn, which formerly used to be the favourite resorts of the academic youth, have lost their charms, not merely on account of high and extravagant prices prevailing there, but owing to a kind of fashion and impulse among the young men themselves. Nevertheless it is a good sign, that many of them prefer the more quiet abodes of learning and instruction. Hence the various faculties at Halle, Tübingen, Göttingen, and even at Strassburg so recently founded, not only keep up against the Leipzig monopoly, but continue to advance steadily in quality and quantity from one term to another.

Mr. R. Ferguson has lately published a glossary of the Cumberland dialect under the title of *The Dialect of Cumberland*. The work contains a good deal of useful material, whose value is unhappily greatly impaired by its thoroughly vicious and unscientific treatment. Not the slightest indication is given of the actual pronunciation of the words, and the greater part of the book is taken up by random etymologies, in which the established laws of sound-change are utterly ignored. Thus the author incidentally identifies the Scotch *cummer* with the Sanskrit *kumārī*! When will our dialectologists learn that the parade of etymological knowledge or ignorance, as the case may be, is quite a secondary consideration? Their main business is to give a faithful and full representation of their dialect as it exists, writing its sounds on some definite phonetic system, and giving copious illustrations of the shades of meaning of every word, especially of the commonest words, which are too much neglected in most dialectic glossaries. When they have done this, let them etymologize as much as they like.

Professor March inquires, in the *Transactions of the American Philological Association* (1872), Is there an Anglo-Saxon Language? The drift of the paper is to combat the present tendency of English philologists to discard the name "Anglo-Saxon" altogether as the designation of the earliest stage of the English language, and substitute "Old English" or some equivalent designation. Prof. March insists strongly on the very distinct characteristics of Anglo-Saxon and modern English, remarking that "a German can read it more easily than an Englishman," which is perfectly true. Indeed, it may safely be said that no one has ever obtained a critical mastery of A.S. who approached it from a purely modern English point of view. But we must say that Prof. March has greatly exaggerated the distance between the two stages. Thus he makes the diphthongization of *i* and *e* an essential distinction, forgetting that the change is not older than the sixteenth century even in the literary language. Prof. March admits that the changes have been gradual and have formed an unbroken chain, but contends that the literary periods are sharply defined. Whether or not we accept Prof. March's conclusions, we cannot but agree with him in reproaching the present chaotic nomenclature, which includes both Chaucer and Alfred under "Old English": if a reform is to be made, it must be consistent and systematic, and general adoption must be secured for it.

The French Radicals do not seem to tread with quite so sure a footing upon the field of science as on that of politics. In a recent biography of the members returned to the National Assembly at the elections of April 27th M. Lokroy is said to have accompanied M. Renan to Syria in the capacity of private secretary, and when there "il déchiffrait des inscriptions Sanskrites comme s'il avait pâli toute sa vie sur les hiéroglyphes" (!).

We understand that the next number of the excellent *Revue Celtique*, conducted by M. Gaidoz (beginning the 2nd vol.), will be out at the beginning of August.

Contents of the Journals.

Journal Asiatique. Avril, 1873.—Note sur deux Inscriptions Nabatéennes; par M. E. Renan. [The first of these inscriptions found at Um-er-Russas has already been published in the Quarterly Statement for March-June, 1870, of the Palestine Exploration Fund.]

That facsimile was, however, as M. Renan says, very unsatisfactory, and made it impossible for the lamented Dr Levy to arrive at a correct interpretation. M. Renan has received from M. Ganneau an excellent rubbing and translates as follows: "This is the tomb of Abd-Malkou, son of Obeisu, the strategé, which Iameru, the strategé, his brother, has caused to be built for him." The second inscription was published in 1851 at Naples, where the original is at present. The document was first deciphered by Prof. Gildemeister, and again by Levy. M. Renan now proposes some new readings.]—L'inscription de Dibon; traduite et annotée par M. Ch. Bruston. [Proposes a number of new readings and interpretations, criticizing those hitherto given.]—Un Commentaire Samaritain inconnu; deuxième appendice à la Chronique Samaritaine; par M. Ad. Neubauer. [Extracts from a commentary on Genesis i. to xxviii. 10, composed by a Samaritan in A.H. 445 (A.D. 1053), which Dr. Neubauer believes to be of some interest, as probably being one of the oldest known to have been written by one of that sect. The MS. has lately been acquired by the Bodleian Library.]—*Nouvelles et Mélanges*: Communication de la traduction d'une inscription bilingue; par M. J. Oppert.—Inscriptions idéographiques de Hama et d'Alep; par M. Clermont-Ganneau.—Review (favourable) of Vambéry's *Uigurische Sprachmonumente und das Kudatku Bilik* (M. Pavet de Courteille); and notices (by M. J. Mohl) of *Nouveau testament de N.S. Jésus-Christ, version arabe; à Mossoul*; Capt. Burton's *Unexplored Syria*; and Dr. G. Bühler's Catalogue of Sanskrit MSS. Fasc. iii.

New Publications.

- ANCESSI, V. *Études de Grammaire comparée; l'S casatif et le thème N dans les langues de Sem et de Cham.* Paris: Maisonneuve.
- ANDRESEN, K. G. *Die altheutschen Personennamen in ihrer Entwicklung u. Erscheinung als heutige Geschlechtsnamen.* Mainz: Kunze.
- ARNOLDT, R. *Die Chorpartien bei Aristophanes scenisch erläutert.* Leipzig: Teubner.
- AUTENRIETH, G. *Wörterbuch zu den homerischen Gedichten.* Leipzig: Teubner.
- AWARISCHE Texte, hrsg. v. A. Schiefner. (Extract from *Mémoires de l'Académie de St. Pétersbourg.*) Leipzig: Voss.
- BET-HA-MIDRASH. *Sammlung kleiner Midraschim u. s. w.* 5 Thl. Nach Handschriften—von A. Jellinek. Wien: Winter.
- BUXTORFIUS, J. *Lexicon Chaldaicum, talmudicum, et rabbinicum.* Denuo ed. et annotatis auxit Dr. Bern. Fischer. Fasc. 28, Hoch 4. Leipzig: Schäfer.
- CLAUSSEN, J. D. D. *Quaestiones Quintilianae.* Leipzig: Teubner.
- D'AMBRA, R. *Vocabolario Napolitano-toscano.* Napoli: Detken e Rocholl.
- DINDORF, G. *Lexicon Aeschyleum.* Fasc. I. Leipzig: Teubner.
- ELLENDT, J. E. *Sammlung der Parallelstellen zum ersten Buche der Odyssee.* Berlin: Calvary.
- EPISTOLOGRAPHI GRAECI, recensuit, recognovit, annotatione critica et indicibus instruxit Rudolphus Hercher. Accedunt Francisci Boissonadii ad Synesium Notae ineditae. (Bibliotheca Graeco-latina, vol. lvii.) Paris: Firmin Didot.
- FIELD, T. W. *An essay towards an Indian Bibliography.* New York.
- FOUCART, P. *De Collegiis scenicarum artificum apud Graecos.* Paris: Klincksieck.
- GARDTHAUSEN, V. *Die geographischen Quellen Ammians.* Leipzig: Teubner.
- GOLDZISHER, Dr. Ign. *Beiträge zur Geschichte der Sprachgelehrsamkeit bei den Arabern. (II.) [Academy Reprint.]* Wien: Gerold's Sohn.
- HEYNE, Dr. M. *Kleine altsächsische und altniederfränkische Grammatik.* Paderborn: Schöningh.
- HOFFMANN, Prof. Dr. F. A. *Vindiciae Venusinae.* Neisse (Hinze).
- HOLM, Ad. *Das alte Catania.* Lübeck: Bolhoevener.
- JANNEAU, G. *Luc Van Tiên, poème populaire annamite, transcrit pour la première fois en caractères latins, d'après les textes en caractères démotiques.* Paris: Challamel aîné.
- KAEGI, A. *Kritische Geschichte d. spartanischen Staates von 500-431 v. Chr.* Leipzig: Teubner.
- LUDWICH, A. *Beiträge zur Kritik d. Nonnos v. Panopolis.* Berlin: Calvary.
- MÄTZNER, E. *Englische Grammatik.* 1 Thl. *Die Lehre vom Worte.* 2 Abth. Berlin: Weidmann.
- MERGUET, H. *Lexikon zu den Reden der Cicero.* 1 Bd. 1 Lfg. Hoch 4. Jena: Mauke.
- PERNY, P. *Grammaire de la langue chinoise orale et écrite.* T. I: langue orale. Paris: Maisonneuve.
- POLEMONIS declamationes quae exstant duae. Rec. H. Hinck. Leipzig: Teubner.
- RICHARD, L. *Cours théorique et pratique de la langue commerciale de l'Archipel d'Asie, dite Malaise.* Paris: Dumoulin.

SIGG, J. *Der Verfasser neun angeblich v. Demosthenes f. Appollodor geschriebener Reden.* Leipzig: Teubner.

WESENBERG, A. S. *Emendationes alterae sive annotationes criticae ad Ciceronis epistolarum editionem.* Leipzig: Teubner.

ERRATUM IN No. 75.

Page 249 (b) 19 lines from bottom, for "Passion" read "Passover."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 76.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Friday, August 1, and Advertisements should be sent in by July 28.

Just Published.

Homer's Odyssey. First Twelve Books. In two vols., 8vo. Edited by HENRY HAYMAN, D.D., Head Master of Rugby School, with prefaces, notes, and appendices, and collations of several MSS. Price of each volume, 14s. D. NUTT, 270, Strand.

BY THE SAME.

A Fragment of the Jason Legend. 12mo, 2s. PARKER & Co., Oxford.

No. I. in 8vo, 268 pages, price 4s. sewed.

Hermathena: a Series of Papers on Literature, Science, and Philosophy. By Members of Trinity College, Dublin. (*To be continued Annually.*) London: LONGMANS & Co. Dublin: E. PONSONBY.

Vol. I. pp. 416, with Portrait and 87 Diagrams, price 18s.

A Treatise on some New Geometrical Methods. By J. BOOTH, LL.D., F.R.S., &c., Vicar of Stone, Buckinghamshire. (*In Two Volumes.*) London: LONGMANS, GREEN, and Co., Paternoster-row.

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THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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No. 77.] REGISTERED FOR FRIDAY, AUGUST 1, 1873. TRANSMISSION ABROAD. [Price 6d.]

General Literature.

Poésies Inédites de Lamartine. Paris: Hachette et Cie. 1873.

THE publication of posthumous poems is not, as a rule, likely to satisfy any but critical desires. Except in the case of a poet's sudden death it is not probable that work of any great value will be found among his manuscripts, and the probability becomes very small indeed when the poet has reached, and almost exceeded, the utmost limits of human life. But the interest if not the value of the volume before us does not depend entirely upon the specimens of Lamartine's own work which it contains. For it opens with a preface or rather a preliminary dissertation by M. Victor de Laprade, which is not likely to pass unnoticed by persons of combative tendencies. M. de Laprade is of course entitled to the possession of his opinions, perhaps also, as an academician and a not unsuccessful follower of Lamartine himself, to the expression of them. If therefore it pleases him to call his master "le premier représentant de la grande poésie dans notre littérature, et peut-être dans toutes les littératures de l'Europe," we, who do not exactly take this view, can pass the statement by without further comment. But when he proceeds to assert that "les âmes d'aujourd'hui seraient plus difficiles à déraciner de la terre, que celles des premiers lecteurs de Lamartine," and to claim as a special subject of pride for his own generation that they understood and adored the author of the *Harmonies*, it becomes necessary to protest against such a violation of some of the plainest and justest canons of criticism. No man who has reached a certain period of life is a fair judge of the poetry which coincided with, perhaps produced, his own intellectual development; still less is any man entitled to assert that the poetical taste of one age is better or worse than that of another, merely because the subjects whereon that taste was exercised were different in character. The dates of the pieces contained in this volume are scattered over a long period of years, the latest being some half century younger than the earliest. Two tragedies, one complete, the other unfinished, fill more than half the book. They appear to have been written in succession during the autumn of 1813, and so are almost contemporary with the beautifully engraved portrait which does duty as frontispiece. The completed

piece "Médée" is certainly a creditable performance of its kind, and interesting in respect of its versification, on which subject more will have to be said presently. It is executed in the approved fashion, with the due allowance of confidants and a proper absence of horrors on the stage, but the conception is feeble and unworthy of the subject. Two most unjustifiable and unfortunate liberties are taken with the fable, Athens being substituted for Corinth as scene, and the play ending with Medea's declaration, "moi je meurs." The mighty sorceress, part goddess part demon, instead of dismissing as a tale that is told the episode of her passing subject to jealousy and other human passions, succumbs to these passions like an ordinary woman, and betakes herself to the commonplace refuge of suicide. This is not the Medea of Euripides.

Passing over the unfinished "Zoraïde," we come to the most interesting part of the volume, the plan and a remarkable fragment of the huge projected epic "Les Visions," whereof "Jocelyn" and the "Chute d'un Ange" are only episodes. Lamartine's own account of the origin and development in his mind of the idea of this poem partakes somewhat of the manner of Rousseau, and suggests certain painful doubts as to the exact amount of truth which it may contain; and the plan is an evidently impracticable one. Independently of its gigantic dimensions, the history of the world, poetically represented in that of a superhuman being condemned to a succession of human existences and liable to ultimate restoration or condemnation, is hardly a manageable or promising subject. But the fragment here printed is certainly an admirable specimen of the poet's work at its best. Narrative poetry was undoubtedly Lamartine's forte; indeed in this department he has neither superior nor rival as far as France is concerned. For narrative requires rather a happy co-ordination of faculties than great supremacy in any one particular, and is peculiarly suited for the display of a melodious if somewhat monotonous style. The scene of the fragment is laid on the banks of the Lake of Geneva during the Crusades. An ancient crusader, Béranger, rules his vassals, passes the time in knightly amusements, and brings up as page and foster-brother to his only daughter Hermine a mysterious foundling, who arrives in an ark drawn by swans, and is named Tristan. A neighbouring baron, who is a rejected suitor for Hermine, determines to carry her off, lays an

ambush, and succeeds, notwithstanding much prowess on the part of Tristan. Being unable to detach Hermine from his arms, the ravishers carry them together to their boat and embark. On the way Tristan throws himself with Hermine into the lake which they are crossing, and, baffling their captors by some unexplained miracle of swimming, succeeds in carrying her to an islet. Meanwhile, thinking herself about to perish, she avows her love for him. Finally she falls asleep, and her lover, supporting her, falls into a very natural train of thought, wherein he thus expresses himself—

“ Combien de fois durant ces heures enchantées
Aux tremblantes lueurs par la flamme jetées,
Portant un œil ravi sur ses chastes appas,
Un invincible attrait me fit ouvrir les bras,
Et, prêts à la presser sur ce sein qui l’adore,
Les laissa retomber pour les rouvrir encore !
Combien de fois, brûlant d’ineffables desirs,
Respirant de plus près le feu de ses soupirs,
Dans ses traits endormis mes regards s’étanchèrent,
De son front virginal mes lèvres s’approchèrent,
Et sans pouvoir jamais fuir ni s’en détacher
Mes lèvres ni mes yeux n’osèrent la toucher !
Oh ! que si j’avais pu, dans l’ardeur qui m’enflamme
Sans offenser, Seigneur, ni le ciel ni ma dame,
Abandonnant mon cœur à ses divins transports,
Dans ces bras, sur ce cœur, la presser sans remords,
Et, lui communiquant le feu qui me dévore,
Epuiser mon bonheur au moins jusqu’à l’aurore,
Oui, j’aurais consenti, pour cette nuit d’amour,
A ne revoir jamais la lumière du jour,
Mais plutôt qu’à mes bras elle ne fut ravie,
D’exhaler à la fois mon délire et ma vie ! ”

It must be allowed that, even if this extract contains nothing strikingly new, it is at any rate (with the exception of the terribly weak line which we have italicised as breaking the sense and spoiling the climax) faultless poetry. It forms the real conclusion of the fragment, the few lines which follow merely telling that the hero with the aid of Hermine’s beads subdues his inclinations and goes peaceably to sleep. Most of the poems which follow are short complimentary stanzas, or inscriptions in albums ; but at the end of the volume there is a piece of great interest, being nothing less than a version of the famous “ Lac,” containing several verbal variations from the published form, and two entire stanzas which have not hitherto appeared. In the original they immediately succeed the song, and run as follows :—

“ Elle se tut : nos cœurs, nos yeux se rencontrèrent ;
Des mots entrecoupées se perdaient dans les airs ;
Et dans un long transport nos âmes s’envolèrent
Dans un autre univers.
Nous ne pûmes parler : nos âmes affaiblies
Succombaient sous le poids de leur félicité,
Nos cœurs battaient ensemble, et nos bouches unies
Disaient : Éternité ! ”

It is very possible that Lamartine, in omitting these two fine stanzas, was actuated, as M. de Laprade tells us, by “ un scrupule de discrétion et de spiritualisme délicat,” but it is hardly questionable that the omission has by no means improved the poem. We have always been conscious, in reading it, of an abruptness of transition between the song and the next stanza, of a gap which ought to have been filled up, and this abruptness is now fully accounted for. It is certainly surprising that the poet, if prevented from publishing the poem as it originally stood by a feeling of prudishness, did not endeavour to bridge the interval in some way. As it now appears the piece is, as nearly as can be, perfect.

Nevertheless, in the kind and nature of this very perfection it is not hard to discern the secret of Lamartine’s failure where he fails, and of the astonishing diminution which his popularity has undergone. All Frenchmen of literary tastes confess, some with regret, some with indifference, that Lamartine, enjoying as he does the doubtful

honours of a classic, is not read. To M. de Laprade this seems horrible, but the reason is not far to seek. He was read because he expressed the sentiments of his contemporaries, because he clothed those sentiments in more melodious language than the common run of men, even of authors, could attain to. But the sentiments which he expressed have no longer the charm of novelty ; they have been succeeded, if not by others, at any rate by different forms of the same, and the expression not the sentiment is the only charm which remains. Now the formal beauty of Lamartine is not sufficient to arrest the attention of a reader to whom his matter is commonplace or unattractive. It is this fact which is overlooked by those critics who, like the writer of the preface to this volume, object to “ cette importance exclusive donnée à la forme aux dépens de la pensée.” Beauty of thought depends, in an immense majority of cases, on sympathy between writer and reader, sympathy which is produced and destroyed by infinite accidents of place and time. Beauty of form is quite independent of any such casual influences : and it is this beauty which Lamartine has not, at least in any supreme degree. He “ attains not to the first three ; ” he is satisfied with ordinary and accepted vehicles for his thought. To prove this we have only to look at his versification and diction.

The result of the unceasing efforts to smooth and refine the Alexandrine couplet had been but too-often weakness and monotony. Even in Racine’s time a sort of horror of any sharp and distinctly sounding word prevailed : and the main object of the French versifier was to produce a line which should run in a kind of easy slope from beginning to end, never arresting the voice by any strong collocation of letters. Gradually, as was natural in the adaptation of a strict quantity-metre to a language which makes no great distinction between long and short syllables, the whole character of the iambic trimeter became altered, so much so that an Englishman often feels inclined to scan Racine’s verses as anapaestic dimeters, little or no emphasis being observable except on the third, sixth, ninth, and last syllables. Especially there is a tendency to make the tenth syllable as unemphatic as possible, a pronoun, a preposition, or some other insignificant word occupying that position. Add to this the more or less complete isolation of the couplets, and a tolerably clear idea of the difficulties against which the revivers of poetry in France have had to struggle may easily be obtained. The great poets of the present century have adopted different measures of reform. The excessive purism of French poetical art has debarred them from employing the natural and best corrective of monotony—a corrective which Mr. Swinburne has applied with admirable skill and success to the English heroic couplet in “ Anactoria ”—namely, the frequent admixture of tribrachs. But they have perceived and adopted the next best plan, that of relieving the line at intervals with emphatic syllables, especially in the tenth place. Victor Hugo prefers the obvious and not unsuccessful expedient of disjoining it as much as possible by means of stops—an example which has been much followed. Alfred de Musset usually avoids the regular couplet altogether, and by interlacing his rhymes produces irregular stanzas of varying length, which are decidedly effective. Théophile Gautier alone, the “ impeccable ” poet, has managed, by some hidden exercise of art, to reproduce the old Alexandrine couplet, little altered in general aspect, and yet free or nearly free from insignificance and monotony. But Lamartine seems to have thought no change necessary. His verses, melodious as they are, have the old monotonous swing, his couplets the old uniformity of cadence. Even his lyrics have the aspect of Alexandrines cut into shorter lengths rather than of independent creations.

And yet conscious as we may be of these and other shortcomings, it is impossible to urge them without reluctance against the author of such poems as the "Lac" and the "Paysage dans le golfe de Gènes"—poems beautiful in themselves, and wonderful if we consider the literature which preceded them. Lamartine at least began the revival of poetical thought in France, and it seems hard to reproach him who did so much with not doing more. If he was too ready to put the new wine into old bottles, if he lacked the energy, the patience, or the genius to continue the work which he had begun, this is surely not an inexcusable fault, and, but for the extravagant pretensions of his injudicious admirers, would meet with no severe treatment. Lamartine was in some sort a French Cowper. Like Cowper, he clung somewhat to the old forms while setting an example of the new spirit. But the English poet had the good fortune to pass away before any one appeared to continue and excel his work—it was Lamartine's evil destiny to live and *not* to learn.

GEORGE SAINTSBURY.

Lars. By Bayard Taylor. Strahan and Co. 1873.

THERE is a curious resemblance in more respects than one between the kind of poetry that finds favour in America now and that which found favour at Rome under Augustus. There is the same combination of refinement in form with a sterile elevation of thought, which in both cases it would be safe to trace to the natural enthusiasm of the few cultivated minds of a vigorous but backward population for the best commonplaces that have been recently imported. The population of America is at once more vigorous, more virtuous, and upon the whole less ignorant than that of Rome in the days of Horace, but as it is incomparably more numerous its other superiorities only make its influence on those who address it more overpowering and more mischievous.

However Mr. Taylor's last volume is a very fine and solid piece of work, and we do not know that it is an unmixed evil that he has found it natural to accept conditions of work which are not exactly favourable to complete originality. It is a real distinction to be able to make as profitable use of *Enoch Arden* and *Theocritus* as Statius made of *Homer* and the *Aeneid*.

Lars is a Norwegian hunter and woodman, in love, like Per a fisherman, with a certain Brita who cannot make up her mind between them, and gives Lars enough encouragement to make Per, whom she prefers without knowing it, furious. The result is a fair fight with knives, in which Lars kills Per, and Brita declares her passion for the dead. Lars goes to America to avoid Brita rather than the blood-feud: after an unsuccessful attempt to make himself at home in a Swedish settlement which failed to maintain itself in the neighbourhood of Wilmington, he finally drifts into a Quaker family and falls in love with the daughter Ruth, and is converted in consequence of knocking her father down by accident in the course of a quarrel with her Quaker suitor. After this he naturally feels it his duty to return to Norway to make his countrymen acquainted with the blessings of Quakerism, and gives Thorsten, Per's next of kin, every facility for settling the blood-feud in his own sense at a second knife-fight, where Thorsten of course discovers that it takes two to make a quarrel. Brita finds it difficult to forgive the loss of her lover, but Ruth wins her too, aided by the sudden reappearance of the brooch of Brita's grandmother which had fallen overboard during a voyage with Per; and a Quaker community is prosperously established in Arendal, for the pastor of Hardanger, Lars'

native place, is intolerant of innovations, and is supported by the public opinion of the unconverted majority.

This story is told with a dignified refinement which is too abstract not to be a little unreal; it is impossible to discover for instance how far Lars was exposed to danger from the police: the poetry of real life has its advantages, but it is impossible to have it without its disadvantages of occasional silliness and occasional ugliness which Wordsworth and even Mr. Buchanan have known how to accept. Another drawback that perhaps is akin to the abstract stateliness of treatment is that we cannot help feeling that the skeleton of the story, with its moral which might do honour to a copy-book, stood complete before the author's mind from first to last, instead of growing up in the telling like Marnion or even Evangeline. At the same time it would be unjust to imply that Mr. Taylor has done nothing but overlay his theme with mechanical ornaments; we may not find his theme so interesting as he does, but we cannot fail to see that he has caressed it till it grew into genuine poetry.

The concluding lines of the poem are a fine illustration of what we mean.

"The Lord fulfilled in Ruth one secret prayer,
And gave her children; and the witness borne
By Lars, the voice of his ensprinkled blood,
Became a warning on Norwegian hills.
Here, now, they fade. The purpose of their lives
Was lifted up, by something over life,
To power and service. Though the name of Lars
Be never heard, the healing of the world
Is in it: nameless saints. *Each separate star
Seems nothing, but a myriad scattered stars
Break up the night, and make it beautiful.*"

One can hardly call the thought poor that turns so naturally into a splendid image; but there are passages instinct with the unmoral poetry of travel which make us wish that Mr. Taylor's imagery always stood alone. Here for instance is Lars' return to Norway:—

"Calm autumn skies were o'er them, and the sea
Swell'd in unwrinkled glass: they scarcely knew
How sped the voyage, until Lindsnees,
At first a cloud, stood fast, and spread away
To flanking capes, with gaps of blue between,
Then rose, and showed, above the precipice,
The firs of Norway climbing thick and high
To wilder crests that made the inland gloom.
In front, the sprinkled skerries pierced the wave;
Between them, slowly glided in and out
The tawny sails, while houses low and red
Hailed their return, or sent them fearless forth."

That is a series of impressions which it was worth while to describe—it could not have been painted.

In general the Norwegian part of the book is better than the American. The prayer of Ruth's father which converts Lars is impossible without being ideal, while Brita's maidenly hesitation is very pretty and idyllic, though over-analysed: the knife-fight is described as if it had been seen, and it must have been worth seeing; but though Mr. Taylor succeeds in writing like an eye-witness, we prefer an eye-witness who describes his impressions to one who records his inferences, though the record may be vivid and the inferences accurate.

G. A. SIMCOX.

LITERARY NOTES.

The second edition of Dr. Emile Isambert's *Itinéraire descriptif, historique, et archéologique de l'Orient* deserves to be recommended to English tourists and the public at large; the first part, treating of Greece and European Turkey (ix + 1084 pages with 11 maps and 23 plans, Paris, Hachette, 1873), is just out. All the recent archæological works and explorations have been laid under contribution, and the English reader will

be gratified to find that use has been made of all important English works bearing on the subject, such as Mr. Tozer's *Travels* and those of Misses Mackenzie and Irby. But the chief value of the new guide, and the reason why it will easily supersede similar books, is that it embodies the explorations and discoveries of the French "École d'Athènes." Many members of the school have placed at the disposal of the author private notes on their itineraries, and some have contributed entire chapters; e.g. the chapter on the Isle of Crete is by M. George Perrot, the well-known traveller and archæologist, the description of Santorin is by M. François Lenormant, &c. Not only does Dr. Isambert's *Itinéraire* give the practical information necessary to render these countries more accessible to tourists; it also sums up in an encyclopædic form the archæological discoveries made in that classical and noble soil. Special notices convey the general information required by the traveller who knows but little of the country: such are the introductory chapters on Greece, Turkey, and the Danubian principalities, which treat of the geography, history, architecture, manners, language, and political organization of each. M. Barbier de Meynard has contributed the pages on the Turkish language, and M. Ubinini those on the Roumanian. We are surprised to miss similar notices of the Slavonian languages, and more especially of the Servian, for the knowledge of Servian is quite as necessary in Servia, in Montenegro, and in the Servian provinces of Turkey, as that of Roumanian in Roumania, or Greek in Greece, and everyone acquainted with Eastern matters knows that the development and influence of Servia, "the Piedmont of the East," as a politician has called it, are making rapid progress. It would surely have been easy to put this branch of the subject, as has been done for the others, in the hands of a competent scholar. The importance of the Slavonian element in the Turkish Empire has, indeed, been strangely underrated in this book, and it surprises us to see that for the statistics of nationalities in Turkey the author gives (p. 468) the official numbers, which are manipulated by the Government to make European politicians think that Osmanlis, i.e. real Turks, are twice as numerous as they actually are on this side of the Bosphorus. Notwithstanding its deficiencies in this respect, Dr. Isambert's Guide-book will prove useful to the tourist in the East. Besides, the author, who is a qualified medical man, gives advice on the disorders to which the Western traveller in the East is liable, together with particulars as to diet and medicine by which they may be avoided or cured.

The *Lettres à la Princesse*, which were published a few months ago as the first instalment of Sainte-Beuve's correspondence, have already reached a third edition; a fact which must be held to justify their separate publication, though if all the courteous little notes of invitation, acceptance, excuse, &c., had been omitted there would scarcely have been material for a volume left. The letters certainly help to make us better acquainted with one of whom it might be said (to borrow his own words on Cicero): "C'est le plus grand littérateur qu'il y ait jamais eu, le plus élégant, le plus instruit, le plus spirituel, le plus honnête (avec son grain inévitable de vanité), et aussi le plus philosophe." His philosophy was certainly very like that of a humane gentleman of Imperial Rome, and his vanity, if a susceptibility which was not without dignity is to bear that name, had at least this to excuse it, that passive self-respect is almost as difficult as independent action in an atmosphere so charged with patronage as that in which he had to move. It is strange that with all his acuteness and a sincere if not very enthusiastic patriotism, he should have had no political ideal except that the Emperor should be very intelligent and industrious in saving France the trouble of governing herself. The constant references in the letters to the *Lundi* that happened to be in preparation show how much serious work the author was in the habit of giving to those seemingly facile studies; their accuracy and exhaustiveness had already proved that this must be the case; but a criticism (p. 240) on Renan's imaginative way of reconstructing the past partly explains the satisfaction which Sainte-Beuve felt in showing a character with all the true historical circumstances; his pictures are so complete that it is only on reflection we feel how purely objective his treatment is; the study of history, as he says "les faits authentiques tout nus" has the same attraction as that of science for highly cultivated

men who are tired of their own generation. The most interesting letters, biographically, are those in which this weariness finds expression, though always subdued and controlled by the literary point of honour; there is something heroic in the postscript to a letter dictated from a sick-bed: "Je tâcherai de faire une colonne on deux sur Saint Victor: il faut, tant qu'on est là, saluer les talents." The pointed criticisms on individuals, often still living and famous, which are occasionally met with in the letters, ought not to make enemies to the memory of a writer whose criticisms were always of such a high literary quality that to be made the object of one was to be recognised as a possible candidate for immortality.

In the last number (July 16) of the *Politique Positive*, the Parisian organ of Positivism, it is stated that "imperious and unfavourable circumstances" compel its suspension for an indefinite period.

The *Quarterly Review*, in an article on "Modern English Poetry," in the current number, renews its polemic against a certain artistic school on the ground that its members systematically refuse to give expression to the main aspects of contemporary life. The writers of that school would be more admirable if they were without this limitation of aim, but this is not a reason, though the reviewer seems to think it one, why such artists should force their talent. It is no more a reproach to the civilisation of the thirteenth century to say that it was not yet industrial than it is a reproach to the civilisation of the nineteenth to say that it is no longer military; in the same way it is no reproach to the civilisation of modern England (Victor Hugo is the poet of the revolutions of the Latin races) to say that it has ceased to be poetical. The practical life of different periods is continually finding different channels to express itself in, and when the new channel is found the old is more or less deserted; and it is the same with the ideal life. The main current of intellectual energy runs now to science and politics and history and prose-fiction (though this last is likely to become less copious and more wilfully unreal as we become familiar with the certainties of modern life); it is only a kind of backwater of thought and feeling that keeps poets from being stranded altogether. Poets themselves are a "survival," and it is the law of survivals to dwindle and become extinct; while there are any left they might be allowed to feed in peace upon their natural food, the transformed emotions which arise from a vanishing, decaying past. Those whose good fortune it is to live in the present ought to be able either to leave the past behind without regret or to accept without remonstrance as much as they care for of the only pleasure which it is the nature of its representatives to give.

Anton Springer (*Im neuen Reich*, June 27) points out that a short paper bearing the title "Herstellung des Strasburger Minsters" included in Goethe's *Kunst und Alterthum* was not written by him, but at his request by Sulpiz Boisserée, whose initials were omitted by accident.

Mr. Graves' *Songs of Killarney* (Bradbury, Agnew, & Co.) have a fluent gaiety and tenderness which, together with the distinctive flavour given by the mildly unfamiliar dialect (the author's brogue is not strong), makes them really pleasant reading: "The Invention of Wine" is even positively amusing. "Spring Voices," the second part of the volume, are almost, and "Moods and Melodies" quite up to the highest level of album poetry.

The author of *The Battle of Dorking* has published separately the pamphlet in three volumes on the means of making such a catastrophe impossible which appeared in *Blackwood's Magazine* under the title of *A True Reformer*. He may probably be right in thinking that a pamphlet in three volumes will be more read than a pamphlet in a hundred pages; but there is something confusing and misleading in making some rudimentary though valuable notions of army reform the groundwork of a fabulously prosperous career in politics, and in a book where all the other principal characters are portraits scarcely disguised, it is something more than unfortunate that it should have occurred to the author to make his "true re-

former" interesting by describing the growing alienation between man and wife. It is to the credit of an amateur novelist to prove that he can treat this process as intelligently as and less tediously than Mr. Trollope in *He knew he was right*; and it is almost a stroke of genius to prepare us for the catastrophe by the hero's gratuitous doubts of the honesty of a friendly old lawyer, of which he has the grace to be ashamed; but no doubt suspiciousness and censoriousness are natural temptations to a reformer. The routine of the War Office under the present system is described with a good deal of vivacity, and would probably amuse a departmental public even more than outsiders, who will soon come to be tired of the kind of fun which consists in calling a meddlesome Irish clerk O Verduitt. Still this part of the book leaves the reader under a strong and probably not ill founded impression that an ostentatious parade of accounting for every penny spent to Parliament (under thoroughly unintelligible forms, telling *e.g.* the total expenditure for cloth but not the cost of a great-coat) has led to a system of mechanical centralisation which makes military efficiency impossible. The writer proposes to decentralise, so as to give the district controllers the possibility of being of some use and of acting on their own account, though not without control, while the War Office is to be broken up into departments each of which would be distinctly responsible for its recommendations to the secretary of state for war, while he would be responsible for adopting them or not. It is further proposed to revive the office of commander-in-chief, who is apparently to use the money and men provided by Parliament at his own discretion, subject to the condition of satisfying the secretary of state for war that he is using them well. The scheme for the organization of the army is extremely plausible so far as it can be explained in a novel. The 109 regiments of infantry are to be reduced to 74, each of which furnishes a battalion for foreign service and consists besides of an active and dépôt battalion serving at home, each of which can be brought up from the reserves to 900 strong, together with two militia battalions of the same strength. The dépôt line battalion and the two militia battalions will be completely localised at the regimental head-quarters; the active battalions serving at home will be distributed during peace in nine military divisions; each division is uniform and permanent and complete as to generals, staff, guns, stores, and equipment. The nine divisions are to be combined in war into three armies under generals provisionally appointed in advance, and the reserves who after training receive a retaining fee of a shilling a day, are mainly officered by unpaid volunteers professionally tested and holding provisional commissions in their respective regiments which lapse after seven years in peace and become permanent during war: the militia is officered from the line. Such an army *might* be efficient, which our present army is not; but it seems rather a strong assumption that it would make invasion impossible, after two moderately disastrous campaigns abroad. A great deal too much stress is laid on the abolition of honorary ranks, seniority generals, and the like; it will always be necessary to make the career of officers, who do not govern the country and are hardly ever allowed to fight, tolerable in time of peace.

M. Philarète Chasles, whose recent death is announced, was born in 1798. His father was a zealous Republican, and under the Restoration the son, who was then apprenticed to a printer, was prosecuted with his employer and imprisoned for a supposed plot. After his release, on Chateaubriand's intercession, he proceeded to England, where for some years he acted as a corrector for the press in the Valpy establishment. In 1827 his first independent appearance in literature was successful in obtaining one of the Academy's prizes, and subsequently he became a constant contributor to the *Journal des Débats*, the *Revue des deux Mondes*, *Revue Britannique*, &c. His numerous works on literary subjects, especially the contemporary literatures of Germany, England, and America, were marked by more patience and intelligence than originality, and it must be confessed that if the work of such writers is useful to their own countrymen in giving a superficial familiarity with the names of writers and the subjects of books that would be otherwise ignored, they rather shake the faith of natives in the substantial merit of work that seems so completely to lose its aroma in transmission. M. Chasles for

instance was a sincere admirer of Keats, and yet we feel that French readers would be excusable if the *Étude* upon him left them very little inclined to learn English for the sake of his poems. Still M. Chasles was one of the most distinguished of a class of *littérateurs* whose existence is probably useful and certainly unavoidable.

The controversy in the *Athenæum*, June 28—July 12, on the genuineness of some of the writings of De Quincey included in the collected edition of his works has had the advantage of calling attention to some which have been excluded from it. The most important of these are *Waladmor*, published by Taylor and Hennessey, which is a recast of a spurious German novel purporting to be a translation from a work of the Author of *Waverley* generally assigned to Hārings, who published several other novels under the pseudonym of Willibald Alexis; and an original romance called *Klosterheim*, which may be best described as a scholarly and ingenious continuation of the school of Mrs. Radcliffe, less effective precisely because it is more respectable and more respectful to the reader, who is not systematically brutalised to the point of gloating over an ingenious complication of extravagances designed to produce emotions at once coarse and unreal. Unreal is exactly the word to apply to the *Logic of Political Economy*: the writer seems to have thought Ricardo's work needed completing by some acute and elaborate scholia on value, and by the suggestion that the improvement of agriculture counteracted the tendency of rent to absorb profits, from which he feared anarchical inferences would be otherwise drawn. As the writer held that price was fixed independently of both wages and profits, it is curious that he should in some degree have anticipated Mr. Thornton's theory that the wages fund is not absolutely fixed or limited.

It may be new to some of our readers that the poems in *Terza Rima* which form the perorations to Mr. Thornton's volumes on political economy and general philosophy appeared as far back as 1857 with a dedication to the late Professor Aytoun. The volume was published by Longmans, and took its title from the peroration to Anti-utilitarianism on "Modern Manicheism." The most noticeable of the other poems is "Lancelot du Lac," where the theory is that Vivian carried off Ganore for her favourite and left Arthur with a mere *idolon*, and "The Two Francescas": the second has the fortitude to keep apart from Paolo.

Mrs. Archer Clive died at the age of 75 on the 20th ultimo, from injuries received from a fire caused by a coal falling among her MSS. She will be remembered as the authoress of *Paul Ferroll*, an extremely powerful though parasitical book, for the acute, intense, and sensitive mind of the writer was certainly set in motion by *Jane Eyre*. The object seems to have been to deepen the power and horror of the original and at the same time to produce something less brutal (we do not mean this word to be offensive) and more logical. Within these limits the book is a distinguished success, but though less improbable it is more unreal; *Jane Eyre*, with all its faults, contains genuine passion.

Art and Archaeology.

Lionardo da Vinci's *Treatise on Painting*. [*Das Malerbuch des Lionardo da Vinci*. Untersuchung, &c., von Dr. Max Jordan.] Leipzig: Seemann. 1873.

PROFESSOR MAX JORDAN has made a careful and conscientious study of the circumstances under which the book commonly known as Lionardo da Vinci's *Treatise on Painting* came into print; and though his inquiry could not for various reasons be final, he has brought together much important information respecting the sources and context of this extraordinary volume. The earliest issue of the *Trattato* was a French one, published by Dufresne in Paris in 1651; it contained 365 paragraphs selected from copies made at Milan in the first half of the 17th century by order of Cardinal Barberini. All editions subsequent to this were

taken more or less correctly from that of Dufresne, until Stefano della Bella brought out a new version at Florence in 1792. But della Bella was not more fortunate than Dufresne in the source which he consulted, his MS. being that of Pinelli executed at the close of the 16th century and now preserved at the Ambrosiana. In 1817 Manzi published the Roman edition in 912 paragraphs from a MS. in the Vatican library, which no doubt is of respectable antiquity, but still not in the hand nor of the time of da Vinci.

With incredible patience and minuteness Jordan has sifted and put in order all that can be ascertained respecting these manuscripts; showing what value they possess intrinsically, and what differences characterise the readings. He further proves that after all the *Trattato* as it appears in print, instead of being, as might be supposed, a faithful reproduction of a treatise written by da Vinci, is but a compilation in forms more or less irregular of matter derived from sources none of which are altogether primitive or original. To the question, where the stitchbooks of da Vinci are, and in what shape they were put together; to the further question, whether they were ever written by the master himself, or only taken down at lectures by disciples, no satisfactory answer can be given. We have indeed the assurance of Pacioli in the *Divina Proportione* of 1498 that Lionardo had already finished at that time the "de pictura" and the "movimenti humani," but da Vinci's draught of these sections of the *Trattato* is not known at present to exist; and we are reduced to conjecture as to whether the substance or the letter of them may or may not be found in the twelve codices at present in Paris, no one as yet having given an exact account of those volumes by reason of the difficulties thrown in the way of all students desirous of obtaining a sight of them. Some passages in the *Trattato* are to be found in the *Codex Atlanticus* at the Ambrosiana, of which Jordan gives a complete and exhaustive account; but this codex is made up mostly of fragments and stray leaves, and in so far only leads to an assumption which may prove erroneous, that da Vinci never wrote the *Trattato* at all, but that the book, as handed down to us, is a series of excerpts from notes of lectures and entries in journals collected by the disciples and friends of the painter, and for that reason perhaps not considered till long after his death worthy of the name of so great a master.

Jordan hopes that an accurate examination will be made of the French codices; he trusts that some one may be found to calendar them; but, loth as we may be to think of these hopes being dashed, it is but too likely that the jealousy which has hitherto kept Lionardo's MS. concealed from the public eye will not, in our time, be removed.

J. A. CROWE.

NOTES ON ART.

Our slight knowledge of the early Umbrian school of painting at Foligno, of which hitherto Niccolò Alunno has been almost the only known master, has been recently enlarged by the publication of two monographs on the subject, one by Prof. Adamo Rossi* giving the result of his researches into the registries and archives, especially into the *Archivio comunale e notarile*, of Foligno, and the other by S. Frenfanelli Cibo,† in which, making use of Prof. Rossi's discoveries, he relates the history of Foligno and of several of its distinguished families as connected with its art and its greatest master, Niccolò Alunno, of whose life we for the first time gain a few details. Other masters of the school of Foligno have also been brought to light, such as Maestro Giovanni, who with his sons Girolamo and Bartolommeo is mentioned in documents of the year 1450;

* *I pittori di Foligno nel secolo d'oro delle arti Italiane, testimonianze autentiche raccolte ed ordinate.* Perugia, 1872.

† *Niccolò Alunno e la scuola Umbra.* Roma, 1872.

Maestro Andrea di Cagno, who in 1446 painted a picture of the Healers of the Plague at the Town Gates; Maestro Bartolommeo di Tommaso, several of whose works are still preserved; Maestro Giambattista di Domenico di Riso, who in 1463 painted a beautiful Madonna and Child in Perugia, in which town he had settled and was held in much consideration; Maestro Pietro di Giovanni Mazzaforte, whose name occurs several times in the archives of Foligno; Maestro Polidoro di Bartolommeo; Maestro Christoforo di Jacobo, Ugolino di Gisberto, painting in 1479; Maestro Feliciano de' Muti in 1501; Maestro Francesco, mentioned in 1513; Maestro Lattanzio, Niccolò's son; and Maestro Bernardino di Pierantonio Mezzastri, who brings the list down to the middle of the sixteenth century. The names of all these Foligno masters have been rescued from oblivion by the researches of Prof. Rossi; but as with other researches of like kind that have been of late diligently carried on in Flanders and elsewhere, we gain little besides the bare knowledge that such masters existed, for almost all their works have perished. Even such slight knowledge as this is however valuable, as showing the marvellous artistic activity put forth in the fifteenth and sixteenth centuries by other schools than those with which Vasari has made us acquainted.

The Salon is now closed, and the critics have nearly finished their articles upon it. The total number of entries during the past exhibition is recorded as 435,055, of which 154,796 were by payment and 280,259 gratuitous. 43,344 catalogues were sold.

The official catalogue of the Vienna Exhibition enumerates 1,537 pictures, sculptures, and other objects of art sent from France, 811 from Austria, 725 from Germany, 625 from Italy, 296 from Belgium, 203 from England, 198 from Switzerland, 167 from Holland, 155 from Hungary, 437 from Russia, 101 from Denmark, 71 from Norway, 45 from Sweden, 37 from Greece, 15 from America, 7 from Turkey, and 2 from China. It is not surprising, considering the large proportion of works that France contributed, to find that French artists have received the largest number of medals, namely 138 for paintings, 34 for sculpture, 26 for architecture, and 49 for engravings.

The Spanish school of painting, of which we have so few examples in England, has been represented in several sales that have recently taken place in London. At the newly established Crockford's Auction Hall, the English "Hôtel Drouot," there was sold last week a small but important collection of pictures belonging, it was stated, to a foreign nobleman. Among many examples of the Italian, Flemish, Dutch, and French schools there were also a few Spanish works of remarkable excellence and not of that ascetic religious character which usually marks the productions of Spanish art. A portrait of Philip IV. by Velasquez, an authentic picture of which the catalogue gives a detailed history, was perhaps the most important of these works; but more interesting because less often met with in this country were a portrait of a Chorister of the Chapel Royal by the violent and eccentric Alonso Cano, a portrait of Philip III. by the prudish Carducho, another of a Spanish Doctor by Zurbaran, and two small full-length figures of Spanish Troopers in Flanders by Bocanegra, a pupil of Vandyck and skilful copyist of his style.

A painting by Murillo, also, the one Spanish master with whom we are well acquainted in England, was sold a short time since by Messrs. Phillips & Son, of New Bond-street. The subject of this painting is St. Anthony of Padua adoring the Infant Saviour, and it is said to have been painted by Murillo about the year 1650 for the Church of the Capuchins at Cadiz in return for the kindness shown by the monks of that order to his brother. About fifty years ago this picture was exhibited at the Egyptian Hall, Piccadilly, and excited considerable attention. Since then it has remained in London, but has not been heard of until a few weeks ago, when in consequence of "the settlement of certain family affairs" it came into the hands of the auctioneer, and after a lively competition was acquired by Mr. Cox, of Pall Mall, for the sum of 1,200 guineas.

Mr. Storey's statue of "Jerusalem," which he refused to the Academy, is now being exhibited at Messrs. Holloway's. It is, it need not be said, an extremely remarkable work, admirable perhaps even more for its literary than for its artistic power.

The statue of Carrara stands on a pedestal of polished grey marble; the flesh is tinted to an uniform cream colour to anticipate the effects of time. The figure is seated with one leg crossed over the other among ruins on which the right arm leans, while the left hangs quite listlessly. She wears a sleeveless tunic very nobly treated, a short veil that covers almost all the hair except just at the ears, and a phylactery, which is just as well, for the features are less Jewish than those of the Libyan sybil were African. The face is raised a little and turned to the front of the pedestal, while the body and limbs turn off to the left or the spectator's right. The left side seen in profile gives an expression of generous sadness almost without anger, not quite without hope; but this is probably an accident which might just as well have occurred in nature, for in front where the scowl of the brow is visible we see dumb rage and indignation dying down into unutterable despondency. There can be no doubt that this stony grief is the expression intended, and it is rendered with superb energy, though a doubt suggests itself whether an even more consummate artist than Mr. Storey might not have helped us more to feel that the cheeks and eyelids *had been* flesh before grief stiffened them.

On the plinth of the statue are carved some verses of Lamentations in the Vulgate beginning *Quomodo sedet sola civitas.*

The French Minister of the Fine Arts has bought, it is said the following pieces of sculpture recently exhibited in the Salon:—*L'Enfant des Abruzzes*, bronze de M. Allar, 4,000 fr.; *Jeune Femme au Bain*, de Mme. Leon Bertaux, statue plâtre, 3,500 fr.; *L'Enfant à la conque*, plâtre de M. Chervet, 3,000 fr.; *L'Éducation Maternelle*, de M. Eugène Delaplanche, 4,500 fr.; *Le Mercure*, plâtre de M. Ludovic Durand, 3,500 fr.; *le Buste de Mgr. Darboy*, plâtre par M. Guillaume, 1,500 fr.; *Le Jeune Faune*, plâtre de M. Jules Blanchard, 3,500 fr.; *Mélantho Groupe*, plâtre de M. Allouard, 4,000 fr.; *Jeune Pâtre jouant du tibia curva*, de M. Laoust, 3,600 fr.; *l'Alcéis* de M. Hyacinthe Sobre, 1,000 fr.

A sympathetic article by Ludwig Bund in memory of the late Hugo Becker appears in the current number of the *Zeitschrift für bildende Kunst*, which likewise contains a large but unsatisfactory etching by the young artist, the promise of whose work was doomed to be unfulfilled by reason of an early death.

Mrs. Combe has presented Holman Hunt's famous picture, "The Light of the World," to Keble College, Oxford.

New Publications.

- A TRUE REFORMER. Blackwood.
 AUBIGNÉ, A. de. *L'Enfer*, satire dans le goût de Sancy. Publiée pour la première fois d'après le MS. du Recueil de Conrart. Paris: Lib. des bibliophiles.
 BLANC, C. *L'œuvre de Rembrandt commenté*. Paris: A. Lévy.
 BRAGA, T. *Historia da litteratura portugueza*. In 24 Bänden. I-X. Hamburg: Grüning.
 BROME, R. *Dramatic works*. First complete edition. Pearson.
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Theology.

Holtzmann on the Epistles to the Ephesians and Colossians. [*Kritik der Epheser- und Kolosserbriefe auf Grund einer Analyse ihres Verwandschaftsverhältnisses*.] Dr. H. J. Holtzmann. Leipzig: Engelmann. 1872.

THIS volume marks a significant epoch in the criticism of the epistles with which it deals. Those writers who deny the Pauline authorship of one or both of these letters have been unable to agree among themselves which is the original and which the copy. To the maintainers of their genuineness this question of priority is unimportant; for, supposing that they proceeded from the same author and were written about the same time, we have a sufficient account of the phenomena which create this difficulty. When ideas are still in a fluid state in the mind of the author, they are easily moulded in different shapes, being modified in form and expression as they are influenced by the connexion in which they stand. On the other hand, when they are once crystallized in a written document, they cease to be so tractable. They may be borrowed wholly or in part, and may be broken up or re-arranged in the process; but there ought to be no difficulty whatever in distinguishing the original author from the later plagiarist when the works are set side by side.

Dr. Holtzmann's book is valuable as a confession that any simple theory which postulates the absolute priority of either one is untenable on the hypothesis of spurious authorship. If we place the parallel passages of the two epistles side by side we seem to see in different passages, and indeed in different expressions of the same passage, that the presumption of originality is now in favour of the one epistle and now of the other. De Wette and Mayerhoff both arrange their extracts in parallel columns, as the champions of opposite sides. The advocacy of each is damaged as much as it is served by the passages which he adduces. Criticism has been brought to a dead lock.

Dr. Holtzmann has come to the rescue by a theory of his own, which we may briefly describe as the hypothesis of *reciprocal obligation*. He supposes that the original nucleus was a short epistle to the Colossians, the genuine production of St. Paul, which he finds embedded in our canonical epistle. On this basis an unknown writer forged in St. Paul's name the so-called Epistle to the Ephesians; and, having done so, turned back to the genuine Colossian letter and interpolated it freely, making use of his previous forgery for this purpose. I have called this theory Dr. Holtzmann's own because, though a similar hypothesis was suggested by Hitzig, yet it certainly would not in its original form have attracted much attention; and Dr. Holtzmann has fairly established his claim to ownership by the most careful and systematic elaboration.

Without stopping to inquire whether such a theory bears

on its face the recommendation of probability, we may fairly ask whether the facts alleged by Dr. Holtzmann are sufficient to justify us in setting aside the absolutely universal belief of antiquity respecting the authorship of these epistles. I turn for instance to his remarks on the peculiarities of diction as an indication of spuriousness. I find him calling attention to the words occurring in the Epistle to the Colossians alone among the New Testament writings. "Not only," he writes, "is their great number astonishing—there are thirty-three of them—but also their partially un-Pauline look" (p. 105). Wishing to test the value of such statistics, I told off a number of pages from the end of 2 Corinthians exactly equal in length to this epistle, and I found that they contain at least forty such peculiarities of diction. In the Epistle to the Ephesians, which is half as long again, Holtzmann only reckons thirty-seven (p. 101 sq.). What he means by their un-Pauline look may be inferred by his remarking that St. Paul uses *κατάρτισις* (2 Cor. xiii. 9) and not *κατῳρτισμός* (Eph. iv. 12); that he writes *ἀναπληροῦν* (1 Cor. xvi. 17, Phil. ii. 30) and *προσαναπληροῦν* (2 Cor. ix. 12, xi. 9), but not *ἀνταναπληροῦν* (Col. i. 29). But starting from the genuineness of Ephesians and Colossians (and the external evidence for either is decidedly stronger than for 2 Corinthians), I might argue conversely and similarly that this portion of 2 Corinthians cannot be genuine, because St. Paul uses *κατῳρτισμός* and not *κατάρτισις*; because he writes *ἀναπληροῦν* and sometimes *ἀνταναπληροῦν*, but never *προσαναπληροῦν*. When again Dr. Holtzmann lays stress on the fact that the number of *ἅπαξ λεγόμενα* in these epistles is "great in proportion" (*verhältnissmässig*, pp. 101, 106), it is difficult to grapple with this vague charge; but surely the heresy in the Epistle to the Colossians was quite as exceptional, and therefore as likely to call forth peculiarities of expression, as any circumstances in the passage which I have taken for comparison, or again in the description of the heathen world, Rom. i. 18-32, where the number is quite as great or greater in proportion to the length. Again he thinks it worth while remarking that the Colossian letter contains fifteen words which, though occurring elsewhere in the New Testament, are not found elsewhere in St. Paul. Excluding for the sake of argument the Pastoral Epistles, as Holtzmann does, I counted at least thirty such words in the passage from 2 Corinthians, and probably there are many more, for my investigation was not complete. Why Dr. Holtzmann should lay less stress on this class of words than on the former it is difficult to see; for when St. Paul's style is in question they must be quite as valuable. Of these words however he singles out *πλουσίως* (Col. iii. 16) as worthy of special notice (p. 107). It may be matched with *ἐτοίμως* (2 Cor. xii. 14), which is an exact parallel. Once more; he remarks of the Epistle to the Colossians, "Altogether astonishing is the absence of compounds with *ὑπέρ*, which are so abundant in Paul." He has forgotten that the whole Epistle to the Galatians, which is considerably longer, contains only one instance, the common word *ὑπερβολή* (i. 13), while in the Epistle to the Ephesians, written (according to Dr. Holtzmann) by the interpolator of the Colossian letter, we meet with not less than six. Can we then say that this partiality for compounds in *ὑπέρ* is more characteristic of the genuine Paul than of the unknown forger?

These instances will show the general character of Dr. Holtzmann's researches into the language; but his whole method of dealing with this portion of the subject suggests one general remark. St. Paul's missionary life comprised at least a quarter of a century on any showing; and his epistolary activity must have extended over a considerable portion of this time. Of his extant epistles the first four of our canon

were written within about a year; and Dr. Holtzmann practically limits us to these as the standard of the apostle's style; for he only allows the genuineness of two or three short epistles besides, which together amount to less than one-fifth of the whole body. On what grounds then of reason or analogy are we required to take the literary productions of this short period, as setting the limits to the vocabulary of a man whose life was spent among constantly shifting scenes and circumstances, and whose mind was ever open to fresh impressions?

If from the investigation of the internal character we turn to the treatment of the external evidence, we find it equally unsatisfactory. Dr. Holtzmann would place the date of the Epistle to the Ephesians about the end of the first or beginning of the second century (p. 276). At the same time he allows that it is certainly employed in the First Epistle of St. Peter, while he speaks more doubtfully about its use in the Epistle of the Roman Clement. He has not remembered that the First Epistle of St. Peter itself is certainly quoted in Clement's Epistle—a most important fact in its bearing on the date of the Ephesian letter, as will be evident at once. He has indeed left himself a loop-hole for escape from the inference thus suggested by throwing doubt on the date of Clement's Epistle (p. 277); but will it not occur to the thoughtful reader that a theory which obliges its champion to deny the authenticity of so many documents—the Third Gospel (p. 255), the First Epistle of St. Peter, and the Epistle of Clement, besides several other early Christian writings (p. 276 sq.)—thus discarding a large mass of cumulative testimony, is burdened with a load of improbabilities, compared with which the difficulties of expression and thought in the letters to the Colossians and Ephesians, regarded as the genuine productions of St. Paul, are only as a handful of feathers in the scale? Of this mode of dealing with evidence M. Renan has good reason to say, speaking of Dr. Holtzmann's work, "Que de dangers dans cette méthode trop accréditée en Allemagne, où l'on part d'un type *à priori* qui doit servir de *criterium* absolu pour l'authenticité des œuvres d'un écrivain!"

But there remains one branch of circumstantial evidence, which Dr. Holtzmann has only glanced at, and certainly has not grappled with. The omission of the words *ἐν Ἐφέσῳ* in Ephesians i. 1 from the oldest extant MSS. and from copies used by Origen and Basil; the fact that Marcion called this letter an Epistle to the Laodiceans; the reference in the Colossian letter to an epistle which the Colossians were to obtain from Laodicea; the absence of all special allusions to the Church of Ephesus in the Ephesian letter, connected with the commission to Tychicus to give oral explanations; the circumstance that numerous parallels connect the two epistles together and suggest contemporaneity of writing;—all these are so many convergent lines of evidence, which have their meeting point only in the genuineness of the two letters, the Epistle to the Ephesians having been a circular letter to the Asiatic Churches. Dr. Holtzmann allows that his forged epistle was published in the form of a circular letter; but he supposes (a very improbable supposition) that Marcion adopted his title on purely critical grounds; and he ignores the connexion of the other points of evidence. Yet, when in a Chinese puzzle we find that several distinct blocks of different sizes and shapes fit together and form a symmetrical whole, we are forced to the conclusion that this result is not purely accidental; and in history the cogency of circumstantial evidence is the same. The simple postulate which connects and explains a large number of various facts has the strongest claims upon our belief. This apparent inability to weigh historical evidence constitutes one of the most serious defects in Dr. Holtzmann's elaborate work;

but so much conscientious and unsparing labour will not have been thrown away, if it results in showing that the hypothesis of spuriousness, even in the hands of its most diligent and careful expositors, is attended with critical difficulties far greater than those which it is framed to remove.

J. B. LIGHTFOOT.

RECENT WORKS IN POPULAR THEOLOGY.

Letters to the Scattered, and other Papers. By Thomas T. Lynch. Strahan and Co.

Theology and Morality: Essays on Questions of Belief and Practice. By the Rev. J. Llewelyn Davies, M.A. Henry S. King and Co.

The Mystery of Matter, and other Essays. By J. Allanson Picton. Macmillan and Co.

The Reconciliation of Religion and Science: being Essays on Immortality, Inspiration, Miracles, and the Being of Christ. By the Rev. T. W. Fowle, M.A. Henry S. King and Co.

THE students of a science are naturally loth to confess that their science is not progressive; but, if in fact it be not, it is plain that nothing but harm can come from ignoring the fact. Whether the study of a non-progressive science can be interesting or remunerative is another question: thus much only is plain, that if it is to be studied it must be studied in the works of the best of former students, not of the most recent. In a progressive science the dwarf has a longer view than the giant on whose shoulders he sits: but where this external aid fails us, it is scarcely possible for us to add so many cubits to our own stature as to enable us to see further than the giants who were on the earth in the days of old; and it is at any rate evident that we gain nothing by borrowing the eyes of our nearest neighbours, when they scarcely can see over our own heads.

Now in the theology of the present day, evident as it is that the fashions are rapidly changing, it is anything but evident that knowledge is advancing, and the four books mentioned above have this in common—that they do not seem to recognise the distinction between those very different ways in which popular beliefs may be modified. The two first mentioned writers, indeed, are open to the charge in a much less serious degree than the other two. Mr. Ll. Davies' book consists of a series of articles which have (with one exception) appeared in periodicals of different sorts: and, judged as magazine articles on questions of the day, they are readable, amiable, and intelligent. Whether a man of Mr. Davies' ability could not give us something better than magazine articles—whether he could not rise to treat questions of more permanent interest by frittering away less of his knowledge and thought on such as are questions of the day only—this is a matter for himself to decide: if he has given us the best of his mind in this fragmentary and occasional form, we have no right to complain of the want of unity and breadth of view. Only there is a certain danger that if our magazine writers are too good we shall not only lose the best instruction of writers who have a capacity for something better than magazines, but the tendency will be encouraged, which already exists among readers, even such as may fairly be called students, to take their facts from magazines instead of books, and their opinions from what they find habitually assumed as self-evident, instead of from the first-hand influence of the pregnant suggestions of far-sighted thinkers.

Letters to the Scattered are also reprints, and posthumous ones. They appeared chiefly we are told in the *Christian Spectator*, at various dates from about 1853 to 1860. It can hardly be judged other than a mistake to reprint *in extenso*, as is here done, the fragmentary contri-

butions to dissenting magazines of a man above the ordinary level of their contributors, but still exposed to the temptation to descend to that level for the sake of his habitual readers. Some of the papers here reprinted are simply sermons and good ones—worth reading, as the author's sermons were certainly worth hearing: but more of them are simply tracts, and while some have a literary merit above that of most tracts—that on "William Treville" has a tender meditative pathos that faintly reminds one of Elia—others are questionable in taste, and one-sided—sometimes even a little unjust—in argument. The *Letters to the Scattered*—i.e. to the minority who, whether "professed Christians" or no, have their intellects active and their interest alive on religious questions—are far above the ordinary tract standard of power. But the first of them is addressed "To Mr. Christian Adamson, of Busy Street, City, and of Quiet House;" and soon we come to a discussion with "Inquirer," with no article and a capital I, as though it were a proper name: all which "corrupt following" of John Bunyan rather offends a reader, unless he remembers that to those for whom it was meant the *Pilgrim's Progress* is the only English classic known more than by name.

The real interest of the book is a representative one: as the orthodox Dissenters have been more or less outside the general course of English intellectual life, so the intellect of England has been apt to ignore them, and it is worth while to have a favourable specimen of what passes for liberal theology among Dissenters. Mr. Lynch's liberalism is of the mildest order, and does not extend beyond sympathy for religious perplexities and earnest warnings that neither speculative orthodoxy nor Congregational Church Government has any value without vital Christianity: yet his tone is always that of a man deprecating imputations on his own orthodoxy, and perhaps we are to understand that suspicions were actually roused against him from the intimation that "circumstances prevented" the series of *Letters to the Scattered* being continued as the author intended. It is only fair to say that if he was assailed on theological grounds the blame must rest entirely with his assailants.

Leaving these two books for the more ambitious works of Mr. Fowle and Mr. Picton, it is difficult to say whether we pass to a higher or lower level. It would be a good thing if the average thought of liberal Churchmen and earnest Dissenters were as good as the thoughts of Mr. Davies and Mr. Lynch: and their works scarcely claim to be more than the utterance of good average thought, such as is current, less articulately, in the schools to which the writers belong. Beyond their own classes or schools it is not to be expected, nor perhaps to be desired, that they should have much influence: within those limits their influence is sure to be salutary. But books like the other two claim to be contributions to theological science, and must be judged by a scientific standard: and when so judged the verdict can hardly be favourable. There has been more ability spent upon *Religion and Science*, perhaps even upon *The Mystery of Matter*, than upon either of the former works; but it has been more unquestionably misapplied. One may sympathise with Mr. Picton's well-intentioned gropings after truth and piety, and be pleasingly surprised by Mr. Fowle's quaint combination of deprecatory reverence with combative liberalism: but scientific treatment is what subjects like theirs call for, and scientific is not the word for the way they have actually treated them. Mr. Fowle glories in his ignorance of "technical orthodoxy" (p. 332) without any suspicion that this ignorance is other than a qualification for superseding it: his quotations even of texts of Scripture are constantly inaccurate, and a man should know the Bible at least as well as he knows educated contemporary opinion.

if he is to effect a reconciliation between the two. In his Preface he does himself less than justice: he fights and scolds in behalf of liberal theology, as though he were incapable of any higher object than a party victory for the religious liberals; but, if party considerations are to be imported into such discussions at all, instead of a wondering lament over the fact (if it be a fact) that religious liberalism has made less progress than Tractarianism, in spite of the influence of three such men as Arnold, Robertson, and Maurice, it would have been worth while if he had asked whether we had not here an example of the impossibility of compromise between irreconcilable principles.

The essays composing the volume are of very different value: those on Inspiration and Miracles being inferior to those on Immortality—in spite of the quaint paradoxes in the latter about the demoralising influences of belief in Heaven and Hell. The two best are the first and last in the book; the latter, on "The Church and the Working Classes," is as sensible as any of Mr. Davies', and perhaps more thoughtful, while in the first there is a good deal of moral insight, and that subdued earnestness, which has been rare in English theology since the dissolution of the Tractarian school, in the way he develops a *contrast* between the character represented in the Gospels and the character inculcated by them.

But the main argument of the book—a tenable one enough, it may be, in itself—is never consistently worked out: the author's own idiosyncrasies, and the current intellectual fashions of the day, force him to mutilate his theory at every joint. The argument, briefly stated, is this: the strength and the first principle of science is that it rests upon facts: the Christian religion is founded upon alleged facts, and if these can be verified (as, if real, they can be by scientific tests) then religion and science will be reconciled. *A priori* tests of incredibility are, in matters of fact, out of place: and Mr. Fowle thinks that the Resurrection, at least, is established as a fact by the ordinary tests of historical evidence: further, that it appears by those tests that there were three great ages of miracle in the history of Israel—the ages of Moses, of Elijah, and of Christ. But then, having refused to reject miracles as incredible *en masse*, he brings back upon us the *a priori* test in a new form, only less consistently applied: miraculous stories are rationalised or denied if it seems to Mr. Fowle that "life could not be carried on under such conditions;" and the belief assigned to any scriptural story, miraculous or otherwise, seems proportioned not to the evidence for it, but to its importance to the Christian life, or the theory of it held by the author. Really, if the Book of Genesis is the very infallible Word of God, we have no doubt good reason to believe that there were such persons as Abraham, Isaac, Jacob, and Joseph: but if this assumption be given up—and Mr. Fowle does not seem to maintain it, or to think it can be maintained—it is difficult to see how they are known to be more real persons than Deucalion, Hellen, and his sons. But in this book (as even by Mr. Matthew Arnold) Abraham is spoken of as though we knew as much about his religious feelings and beliefs as about those of David or St. Peter; and it is scarcely unfair to say that what in more orthodox writers would be only consistency is little better than prejudice in those who concede so much.

One passage from this book seems worth quotation as a warning of what a writer comes to who undertakes to modify out of his own head the system that he has inherited from men (to say the least) with real powers of speculative insight and systematic logic, while he ostentatiously neglects the study of their works, their method, and ignores much of their spirit:—

"To believe that Christ was sinless, and yet in His origin purely human, is to believe not in a miracle, but in a monstrous prodigy—it is to believe that God will break His own laws, do violence to the reason which He has implanted in man, and become the author of irremediable confusion."

Mr. Fowle would not like to be called a Calvinist: perhaps he does not know what a Supralapsarian is. But what is it but Supralapsarianism to say that it is a law of God that men shall be sinful? The Christ of Channing and the Madonna of Pius IX. may not be real beings, such as ever lived on earth: but it is quite possible for the human mind to conceive their existence, and it is most extraordinary to say that the divine goodness would have been dishonoured in the creation of either.

Mr. Picton's book is as ambitious in its scope as Mr. Fowle's, and its ambition, likewise, seems mainly due to the confidence of ignorance—ignorance, however, in his case of a more excusable sort. Like the former, this volume is confessedly rather a series of essays on kindred subjects than one work divided into chapters: and the essays are such as it does a young man good to write by way of self-education—to have written such essays as these does any young man great credit. But to publish them—and it appears by the title-page that this is not a first work—can only be accounted for by a want of intellectual perspective. He is repelled by the atomic materialism of recent physical science, and seeks to escape from a system like Mr. Herbert Spencer's founded upon it: he is attracted by the "Christian Pantheism" that he finds suggested to him by Mr. John Hunt, and sees in that the only means of escape from the other. But he seems quite unable to grasp the meaning of such a system as Materialism or Pantheism, or its relation to other theories of the Universe, as something greater than the effect produced on his own mind by a single book. He makes in one place the rather extraordinary assertion, "that the establishment of the ultimate substantiality of atoms, or the proof of any theory which should give to the impenetrability of matter more than a phenomenal and conditional value, would necessarily be fatal to any spiritual idea of the universe, and must logically involve atheism." If the word "ultimate" is to be pressed to mean "uncaused," this is of course a truism, but if not, it is difficult to see how, "if the ultimate atoms are real substance, it follows that they are the *only* substance in the universe" (pp. 65, 73). Yet a little further on, after this indignant rejection of anything that looks like Materialism, the point is conceded which alone makes Materialism worth resisting in the interest of morals or religion—that we have no certainty that our own relation to the Infinite Life differs in kind from that of the (in the popular sense) material world. And the claiming as testimonies to Pantheism all the utterances of mystical devotion is a complete ignoring of the question between Theism and Pantheism: St. Paul, and orthodox Christians after him, say that man "lives and moves and has his being" in God, and would admit, though in a somewhat different sense, that the same might be truly said of the Universe: but we do not approach Pantheism unless we say that God lives and moves and has His being in the world, as well as the world in Him. That God is the only Being with more than a phenomenal, dependent, conditional existence, every Christian will acknowledge: if it pleases anyone to abridge this into saying He is the only "Substance," it may be a merely verbal difference; but the question at issue is, has God a Being independent of all (not merely of any) of the phenomena through which His Being is known to us? The main objection to Pantheism, that it does not account for the possibility of the existence of evil, is not touched till the

very end of the book, and then dismissed, in the usual orthodox way, as a mystery upon any hypothesis.

There can be no doubt that it is the duty of everyone who is able to think to make up his mind on the grandest and most practical of all subjects that can occupy thought. There are two possible views as to the right attitude of mind for the investigation of these questions: some will say that truth is to be received submissively, others that it is to be pursued actively: and these two moral ideals reproduce themselves in two opposite, though often interlacing, schools of theological thought. Neither a teacher nor a learner can be blamed, on intellectual grounds, for attaching himself to one of these schools rather than the other: but the fact that the second and more self-dependent one has at present the advantage in the ability of its professors and popularity of its principles gives no right to those of its adherents who are as yet only learners to undertake to teach. This is what Mr. Picton has undertaken, not from vanity, but from an inadequate view of the magnitude of the problem, and still more from inadequate knowledge of what has already been contributed to one or other of its alternative solutions. Mr. Fowle might be conceded the right to speak, not merely as a student, but as a teacher, so far as his powers and maturity of mind are concerned: nor does his intellectual training appear to have been so narrow or so self-directed as the other author's. But he reminds one of Bacon's criticism on the application of dialectic to natural philosophy—that it is like a man practising gymnastics when about to build a pyramid, instead of constructing machinery.

— WILLIAM HENRY SIMCOX.

NOTICES OF NEW BOOKS.

Conspectus Rei Syrorum Literariæ additis notis bibliographicis et excerptis anecdotis. Scripsit Gust. Bickell. Monasterii. 1871. pp. 112.

THIS unpretending work, a copy of which has only just reached us, is based, we believe, on a series of articles on Syriac literature, which appeared in the *Literarischer Handweiser*, of Münster, for 1870, and were duly mentioned in the early numbers of the *Academy*. As it is already well known to Orientalists, we cannot do better than commend it to as favourable a reception from theologians. It is really time that students of theology should open their eyes to the rich and peculiar developments of which the only memorials are in Syriac, and this constitutes the principal claim of the little volume before us on their attention. It is mainly bibliographical, but so abundant in details that it may serve to some extent as a history of Syriac theology. The fullest portion is that on the liturgies and rituals, a subject on which few scholars have so good a right to be heard as Dr. Bickell. We notice that it contains the germ of an interesting work by the same author, *Messe und Pascha*, to which we called attention in No. 75. The numerous extracts from Syriac writings, some of them *anecdota*, are given throughout in a Latin translation. It only remains to be added that the author is a zealous Catholic; this is no detriment to his accuracy, though it is perhaps somewhat too ostentatiously displayed.

Lectures on the Pentateuch and the Moabite Stone. By the Right Rev. J. W. Colenso, D.D., Bishop of Natal. Longmans.

AN attempt to popularize the evidence for the most important results of advanced Biblical criticism, such as (1) that no part of the original story of the Exodus can have been composed *before* the time of Samuel, (2) that Deuteronomy was written not long before the Babylonish captivity, and (3) that the Levitical legislation originated during the exile (a result, we may remark, which will be questioned by other than "traditional" critics). Three appendices are added: 1. the Elohist narrative from Genesis and Exodus; 2. the original story of the Exodus from the books of Exodus, Numbers, and Deuteronomy; 3. extracts from the *Edinburgh Review* (of which we do not quite see the relevance) respecting the pre-Christian Cross. A work of this kind does not claim to be original, but even scholars will be interested by the remarks on p. 9 accounting for the superiority of the Elohist to the Jehovistic writers; on Giant-stories (pp. 33, 34); on the critical bearings of the Moabite inscription (p. 58); and especially the answer (pp. 87, 88) to Dr. Kuenen's argument (*Onderzoek* iii. 258) against the Davidic authorship of Ps. lxxviii. It must be allowed that the Moabite inscription

supplies an indirect confirmation of Bishop Colenso's view as to the age of the Jehovistic portions of Genesis; but does not the Bishop go too far in rejecting (with Captain Burton in his last work) the account in 2 Kings iii. 4-27 as "a manifest fiction" (p. 361)? A more sober and critical view seems to be taken by Nöldeke in *Die Inschrift des Königs Mesa*, pp. 20-22, comp. *Academy*, vol. iv. p. 116. On the whole, Bishop Colenso has shown great skill in condensing the salient points of his argument, and deserves a careful hearing from the educated laymen whom he addresses.

Essays Biblical and Ecclesiastical. By the Rev. Henry Burgess, LL.D. Longmans.

THE republication of these neither brilliant nor profound essays on such well-worn subjects as the study of the Bible and the education of the clergy would not under ordinary circumstances demand a record in these pages. We notice them chiefly on account of the services rendered to theological studies by the venerable author in the last generation. The *Journal of Sacred Literature*, of which Dr. Burgess was for fourteen years the editor, stood absolutely alone in England as the organ of a really learned theology. He is, besides, not unknown to Orientalists by his translations from the Syriac, though these have escaped the attention of Dr. Bickell in his otherwise accurate *Conspectus*. But there is also a peculiar historical interest attaching to his theological position. He is one of the few erudite members of the great Evangelical body, and has shaken himself free from some of the most uncritical prejudices to which his brethren are liable. This will best appear from a sentence or two of the preface, which is perhaps the most interesting portion of the book to those who do not belong to the limited public specially addressed in the essays.

"Although trained in early life in a somewhat advanced Puritan school, the writer was ever led to recognise a distinction between Divine Revelation and the casket which contains it, and therefore never was fettered by that idea of an organic oneness in the whole collection of the Old and New Testaments which, he is thoroughly convinced, lies at the root of many luxurious growths of exegetical error and polemical fanaticism. For instance, the writer in no period of his mental history would have been disturbed had the Apocalypse been placed before St. Matthew, or the Canticles and Esther been relegated to the region of the Apocrypha." (Preface, p. vii.)

Dr. Burgess is merely a philologist, or what used to pass current under that name. He has no sympathy with speculation, and thinks dislike of truth the source of heresy. A sound theology is, according to him, the reproduction of Biblical ideas in their original purity. Hence his earnest advocacy of Biblical criticism, and his somewhat startling preference of the Rationalists, who at any rate call forth the energies of more devout students, to the "Perfectionists," who "deny the truth of whatever is not found in their pre-arranged and settled system" (p. 196). Hence too his fervent protest against the mischievous vagaries of Millenarians, and the insipid mysticism of allegorical commentators on the Canticles.

Intelligence.

We regret that we have not space for a complete analysis of Dr. Salmon's valuable essay on The Chronology of Hippolytus, in No. 1 of the new Dublin serial *Hermathena*. One of the interesting questions he touches is, How came Hippolytus in his Chronicle to set down the episcopate of St. Peter at twenty-five years? "One single assumption," he replies, "will explain not only this, but all the variations between the Catalogues of Hippolytus and Irenæus; it is that Hippolytus received the Pseudo-Clementines as historically trustworthy; in particular, that he received it as a fact that Clement was ordained bishop by Peter (*i.e.* not later than about A.D. 67). . . . When you push back Clement's episcopate so early, you will find after his death a large gap in your chronology, which you will not know how to fill up without completely altering the times assigned for the episcopates of subsequent bishops. Grapple with this problem, and I will not say that the solution of Hippolytus will be forced upon you; but I will say, you will not have devised one more simple and ingenious, and which with less violence fulfils the conditions of the question." He differs from Lipsius in his *Chronologie der röm. Bischöfe* in his view of the date assigned to the death of St. Peter in the Hippolytine list, which is not 55, but 67, also on the question whether in the Roman Church of the first century "one presbyter did not stand out clearly to be distinguished as holding recognised superiority over the others." "If history had handed down to us the names of leading presbyters at Rome during the first century, but had left their order in utter uncertainty, it would be a most natural and legitimate inference that there never had been any order, that all had been originally equal, and that it was only in order to make the history correspond to later notions of Church government that the names were arranged in order, which order different writers settled for themselves in different ways. If the view taken in this paper be correct, precisely the opposite conclusion follows."

The *Edinburgh Review* for July contains a thoroughly competent

article on the Talmud, which would have gained much however by a simpler style and a more lucid arrangement. The author complains of the ignorance of the Talmud so general among Christian and particularly among English scholars, as it is irrational to imagine that we can understand the New Testament without an acquaintance with the ideas and language of a teaching which that book constantly presupposes. He then gives an account of the several treatises contained in the Talmud, and sketches the relations to it of the several Jewish sects. He looks forward, rather quixotically, to the gradual extinction of the controversies rife among Christians, when the data of those controversies are known more accurately through the Talmud, and instances the disputes about Baptism, and the interpretation of passages of Scripture which appear to conflict with science. The Talmud will also throw great light on Biblical criticism. Thus the writer of John xiii. 29, "if aware of the customs of Palestine, which differed in many respects from those of the Jews residing out of Syria, could not have intended to identify the Last Supper with the Passover." The historical interest of the Talmud consists in the mutual relation between the Law and the character of the Jewish people, *i.e.*, if we understand the author aright, the reflexion of the characteristics of the several epochs in the sacred literature of the Jews. There is a paragraph here on the text of the Old Testament Scriptures which somewhat startles us by its conservatism. There are two points on which we could have wished the learned author had been a little more diffuse—the means of determining the date of the several portions of the Talmud literature, and the relation of its religious ideas to those of the New Testament. The former is absolutely omitted; the latter is hastily dismissed in an eloquent peroration which whets without satisfying our curiosity.

Contents of the Journals.

Theological Review. July.—The Chaldean Account of the Deluge, and its Relation to the Old Testament; by A. H. Sayce, M.A.—A valuable but too short essay, beginning with a description of the Assyrian libraries, and the reasons for maintaining the very high antiquity of the Accadian original of which Mr. Smith has discovered an Assyrian version. Mr. Smith's translation of the latter is next given, with the alterations of Izdubar into Gisdhubar or Gisdhumas, and Sisru into Tam-zi (comp. Thammuz). Mr. Sayce then gives his own views as to the critical bearings of this remarkable discovery. He thinks "one of the first results . . . is to demonstrate the untenability of the traditional view of the Old Testament, and to confirm the conclusions of scientific criticism." "On the one hand it confirms the existence of two accounts of the story [of the Deluge] in Genesis, of different age and authorship, one of them, however, being closely modelled after the cuneiform records even in forms of expression; on the other hand, it shows the foreign source and mythical character of the event narrated." There are several points in the essay on which we should be inclined to wish a modification of Mr. Sayce's expressions. It may be doubted whether the general opinion of scholars has been really so unfavourable to Berosus as Mr. Sayce seems to affirm, and whether the moral signification of the Deluge is not implied in Berosus (Xisuthrus was translated for his piety), though certainly less clearly than in the cuneiform account. Then with regard to the statement that "'Orthodoxy,' so called, is deprived of its last resource," &c. Has the discarded theory been most advocated by "orthodox" critics or by rationalists (so far as criticism goes) like Ewald and Kalisch? Is it proved that other stories of mythical origin have not been spiritualized in Genesis? Is there not a higher spiritual element in the Deluge-story of Genesis than in that of the Babylonians? It is surely much to have rejected the solar (if solar) basis and polytheism. And is it so difficult to draw a line between the anthropomorphism of Yahweh and that of Hea and Bel? Surely there may be mythical "survivals" in phraseology at a very advanced stage of religion.—M. Lenormant has already shown in a paper published in the *Correspondant*, and noticed by Mr. Sayce in the *Academy*, that the story of the Deluge belonged to a cycle of epic legends, of which the cosmogony and the Tower of Babel also formed a part. It is as yet quite uncertain whether the story of Paradise and "the Fall" can be traced to a similar origin; I confess to great suspicions of the relevance of the cuneiform Gihon. And even the Tower of Confusion of Tongues is not, as is sometimes supposed, of purely Semitic origin. Mr. Sayce has the credit of having shown clearly what had already been conjectured by Schirren, Gerland, and Tiele that the Deluge-story has a solar basis, and to prevent any ill-natured charge of plagiarism I may mention that I had been already led to the same conclusion (much to my own surprise) by a tolerably wide comparison of various cycles of myths. Mr. Sayce evidently tends to the opinion that the Jehovist, who had so accurate a knowledge of the Babylonian mythology, was one of the Jewish exiles in Babylon, though he admits that "the Elohist is fairly independent in his account of the Flood." Certainly such words as *tebah* and *mabbûl* seem to point to a primitive Hebrew tradition. It is to be hoped that Mr. Sayce may pursue this interesting inquiry further on a monumental basis. The beginning he has here made is full of promise.

T. K. CHEYNE.

New Publications.

- BÖHRINGER, F. Die Kirche Christi . . . in Biographien. 1 Bd. Das erste u. zweite Jahrh. 2 völlig umgearb. Aufl. Stuttgart: Meyer u. Zeller.
- DORNER, A. Augustinus. Sein theolog. System u. seine religions-philosoph. Anschauung. Berlin: Hertz.
- GEBHARDT, H. Der Lehrbegriff d. Apokalypse u. sein Verhältniss zum Lehrbegriff des Evang. u. d. Episteln des Johannes. Gotha: Besser.
- HARNACK, A. Zur Quellenkritik der Gesch. des Gnosticismus. Leipzig: Bieder.
- IBN EZRA. Commentary on Isaiah, transl. with Introduction, Appendices, Indexes, and Notes, by Dr. M. Friedländer. Trübner.
- IBN EZRA. The Book of Isaiah, transl. acc. to the Commentary of Ibn Ezra, by Dr. M. Friedländer. Trübner.
- KEIL, K. Lehrbuch der hist.-krit. Einleitung in d. kanon. u. apokr. Schriften des a. T. Dritte gänzl. umgearb. Aufl. Erste Lfg. Frankfurt a. M.: Heyder u. Zimmer.
- LANGEN, J. Das Vatikan. Dogma in seinem Verh. zum N. T. u. der exeget. Ueberlieferung. Bonn: Weber.
- MISCELLANY of Hebrew Literature. Vol. I. Trübner.
- ZAHN, T. Ignatius von Antiochien. Gotha: Perthes.

Philosophy and Science.

Liberty, Equality, Fraternity. By James Fitzjames Stephen. Smith, Elder & Co.

THIS is an able but unsatisfactory book. The style is throughout vigorous and interesting, though often rambling and prolix, and still more often offensively loud and overbearing: and in respect of what is practically the most important issue raised, the argument if neither original nor exactly sound, is at least opportune and effective. Still, along with a good deal of acute reasoning, the work contains a provokingly large amount of wilful paradox and misplaced ingenuity, confusion of ideas, misrepresentation of opinions, and even downright ignorance of some very well known facts. Perhaps the most striking instance of the latter fault is on the first page, where Mr. Stephen declares that "Liberty, Equality, Fraternity," is the creed of a powerful religion, "of which Positivism is the form best known to our generation," Liberty being afterwards explained to mean "the removal of all restraints on human conduct." What can be said of a controversialist to whom the *Politique Positive* looks much the same as the *Contrat Social*? and who attributes to the system that has "l'ordre pour base" the very revolutionary formula for which it claims to have provided a final euthanasia? Nor is this an accidental blunder. For about half the book Mr. Stephen goes on discussing the legitimate influence of society over the individual, directing his argument against Mill and Comtism alternately, in apparent unconsciousness that his two antagonists hold diametrically opposite opinions on the point at issue. One result of this is to exhibit an entertaining and characteristic inconsistency in Mr. Stephen's own sentiments. In chapter ii. he argues with much earnestness, against Mill, on behalf of "social intolerance," and claims that "after careful consideration and mature study" he has "a right to say such and such opinions are dishonest, cowardly, feeble, ferocious or absurd," evidently believing that he can produce considerable effect by these epithets. But in chapter iii., against the Positivists, he maintains that their "spiritual power"—which might fairly be called a scientific organisation of social intolerance—is "fundamentally impotent," because when they pronounce a man "bad and selfish," he has only to answer "I mean to be bad and selfish and I set you and your spiritual power at defiance." It is difficult to see in the abstract, why a weapon that is so much valued by one party should be so useless to another: or to understand why it should be so much worse to be called dishonest and cowardly by Mr. Fitzjames Stephen than to be pronounced bad and selfish by Mr. Frederic Harrison.

But however little Mr. Stephen may know about Positivism, he has certainly studied Mill on Liberty with some care, and selected, on the whole, the right ground for attacking it. It is undeniable that in this and some other parts of his works Mill seems to forget the essential limits of the empirical utilitarian method which he avowedly employs. It is not possible to obtain by this method any absolute practical axioms: but only general rules of a relative and limited validity. Of this Mill elsewhere shows himself thoroughly aware: as e.g. in his *Representative Government*, where he points out the error of demanding that a political constitution should be thoroughly logical, i.e. should exhibit in all its details the application of some one fundamental principle. But in his treatise on Liberty he expressly says that if his arguments "are not good for an extreme case, they are not good for any case;" which seems to show a complete misconception of the kind of proof which his subject-matter admits. And in his whole discussion of the Liberty of Thought and Discussion, as Mr. Stephen effectively shows, he strives to give a fictitious air of demonstrative cogency to what can be no more than probable reasoning. In so far then as Mr. Stephen is employed in criticising the apparent absoluteness with which Mill's practical principles are enounced his position is very strong: so long as he merely falls back on pure Benthamism as on p. 49 where he gives as his formula that "compulsion is bad

1. When the object aimed at is bad.
2. When the object aimed at is good, but the compulsion employed is not calculated to obtain it.
3. When the object aimed at is good, and the compulsion employed is calculated to obtain it, but at too great an expense."

But in so far as he attempts to establish any practical maxims in opposition to Mill's, he fails just as conspicuously as his opponent and in precisely the same manner. For example, he lays down that it is right to persecute socially opinions (1) if we believe them to be false, and (2) if we have bestowed on them "careful consideration and mature study." This second qualification considerably restricts the number of persecutors: indeed, Mr. Stephen adds that the majority of mankind have no right to any opinions at all, except for the regulation of their own affairs. Now there is obviously just as much *utilitarian* ground for persecuting a true opinion that we believe to be pernicious, unless we assume (which Mr. Stephen does not) that its truth must render persecution futile. The manner in which Mr. Stephen meets this argument is a good example of his headlong style. This "is a suggestion," he says, "which it is childish to discuss in public, because no one could avow it without contradicting himself and so defeating his own object." He might as well argue that it was childish to discuss in public, whether it be right to tell lies under certain circumstances: which would no doubt be the case if the discussion bore upon some particular lie, and was held with the person to whom the lie was to be told. And as to the second qualification, it would be surely easy to assail with the reckless controversial tomahawk that Mr. Stephen wields, the proposition that a conviction sufficient "for the regulation of one's affairs" is insufficient for action on society; and that people have no right to be intolerant of unvaracity or unchastity until after "careful consideration and mature study."

On the one hand then it appears that Mr. Stephen's own construction is logically most imperfect: on the other hand, while dwelling on the formal inadequacy of Mill's arguments to prove their conclusions, he continually ignores their substantial force. E.g. if Mill had contented himself with pointing out that by persecuting legally or socially opinions opposed

to our own, we deprive ourselves of a most important and valuable guarantee for the truth of our own convictions, viz. that given by the free consensus of experts, I conceive that his position would have been unassailable. At any rate Mr. Stephen does not assail it, but contents himself with showing that the guarantee is not strictly indispensable. Such criticism is by no means useless: still, taken by itself it is not only jejune but misleading.

Similarly, he never seems to have understood the very simple argument for Mill's view that the penalties of social disapprobation ought to be confined to offences against society. In the case of these acts—if for any reason they lie out of the reach of the law—the force of the social sanction is generally required to counterbalance the immediate gain to the agent accruing from the act, which otherwise would be actually recommended by rational self-love. But where the consequences of an act fall primarily on the agent himself, a properly enlightened self-love would forbid it: and though we may agree with Mr. Stephen in thinking the social sanction more or less useful in some even of these cases, its influence here is only supplementary to considerations of self-interest.

When we pass to chapter v., on "Equality," we find at the outset a very singular account of justice. Judicial justice, our author thinks, is something altogether different from legislative justice: we call a judge just when he applies a law impartially to all persons included under its general terms, but in calling the law itself just we mean only that it is expedient. Mr. Stephen may mean what he likes by his terms at the risk of being unintelligible; but it seems clear that in both cases alike the common notion of justice implies equal consideration for the reasonable claims of all persons concerned. If justice does not simply direct equality of treatment, it clearly excludes arbitrary inequality. Indeed Mr. Mill shows (in a passage which Mr. Stephen quotes but fails to understand) that even in pure utilitarian ethics the idea of expediency requires this element of justice to explain or supplement it, in order that a complete criterion of right conduct may be furnished: for the same amount of happiness may be distributed in an indefinite number of ways, and therefore we require to be told how to distribute the "greatest happiness" at which we are told to aim.

Our author then begins a discussion of Mill's *Subjection of Women*; but is unexpectedly checked by the consideration that any minute examination of the differences between men and women is—not exactly indecent, but—"unpleasant in the direction of indecorum." We should be sorry to encourage any remarks calculated to raise a blush in the cheek of a Queen's Counsel: but as the only conceivable ground for subjecting women, as a class, to special disabilities, must lie in the differences between them and men, it is obviously impossible to decide on the justice—or if Mr. Stephen prefers it, the "expediency"—of those disabilities, without a careful examination of these differences. And in fact Mr. Stephen's sudden delicacy does not suffice to hinder him from deciding the question with his usual rough dogmatism: it only renders his discussion of it more than usually narrow and commonplace.

The third part of the treatise is so far original that it attacks the one element in Christian teaching which the most virulent antagonists of Christianity have hitherto left unassailed—the sentiment of human brotherhood. In discussing "Fraternity" Mr. Stephen seems to confound two very distinct issues, how far men actually do love each other, and how far it would be for their mutual benefit that they should. Sometimes, indeed, the discussion seems to be almost narrowed to the question whether Mr. Fitzjames Stephen loves his fellow-men: which, he assures us, is only the case to a very

limited extent. Life, to Mr. Stephen, would be intolerable without fighting: a millennium where the lion is to lie down with the lamb, presents to him a very flat and tedious prospect: he has no patience with the sentimentalists who insist on pestering him with their nauseous affection. These facts are not without interest for the psychological student: and we may admit that they exhibit forcibly the difficulty of realizing the evangelical ideal. But we can scarcely treat them as serious arguments against the practical doctrine that any possible increase of mutual goodwill among the members of the human family is likely to be attended with an increase of their common happiness. "Yes, but what do we mean by 'happiness'?" Mr. Stephen would reply. Certainly he does not clearly know what he means by it. He generally assumes that every one must necessarily wish to impose his own idea of happiness upon every one else: indeed in one place he goes so far as to say that if two persons' views of what constitutes happiness are conflicting, they cannot have a mutual wish for each other's happiness. Yet Mr. Stephen is elsewhere perfectly aware that "every man's greatest happiness is that which makes him individually most happy, and of that he and he only can judge." What confusion this double view introduces into his utilitarian arguments, we need scarcely indicate. And there are many similar confusions: in fact we continually find Mr. Stephen assuming in one place without hesitation a common opinion against which he elsewhere directs page after page of more or less ingenious sophistry. Throughout the book, too, there is a great want of clearness of method: applications of utilitarian principles and appeals to popular prejudices, the logic of Bentham and the rhetoric of Carlyle, succeed each other with bewildering incoherence. HENRY SIDGWICK.

Notes on Scientific Work.

Geography.

Khiva.—The first of a series of papers illustrated by maps of original value, in which the geographical results of the Khivan campaign will be collected, appears in the number of *Petermann's Mittheilungen* about to be published.

This report consists of a number of letters from Lieut. Hugo Stumm, of the Westphalian hussar regiment, who accompanied the detachment under Col. Lamakine from Kinderli Bay on the Caspian, along the southern edge of the plateau of Ust-Urt, describing the country as far as Fort Ilte Idshe, half way to the sea of Aral, and accompanied with a route map of the country traversed. The clearly-marked southern edge of the Ust-Urt falls almost perpendicularly to the plain beneath, from a height varying from 200 to 500 feet; its dark escarpment often presents wild ravines with caves and water-worn channels, cut through the horizontal strata.

From the base of this cliff, which is undoubtedly the former margin of the Caspian, the ancient sea bed stretches away to southward in undulating plains of sand, with here and there higher dunes and deeper hollows in which dry salt beds appear.

Wells occur at irregular intervals and form the only fixed points in the wide desert, since it is round these that the wandering Kirghiz build the graves and place memorial stones to their dead. Almost without exception these wells are cisterns, not springs, and to the formation of these Lieut. Stumm has given particular attention. The rapid variations of weather in this bare region have also been studiously observed, and several tables giving the temperature of the air and sand with the direction of the wind at short intervals during the day accompany the letters.

A second paper, by Dr. Sievers at Tiflis, also admirably illustrated by a map from Russian sources, describes the military expedition of December, 1872, to the bed of the Oxus, thence to the Kurren-Dagh and to the valley of the Attrek. The channel of the Oxus, which was examined as far as the well of Igdy, has an average depth of 60 to 70 feet, and its sides are steeply cut down into the regularly stratified clay soil. The moisture still finding its way into the channel has induced a considerable amount of vegetation along the river line, which appears almost luxuriant to the wanderer on the arid steppe. An unbroken plain of sand lies between Igdy and Kizil-Arvat, near the base of the Kurren-Dagh in the south. Kizil-Arvat is the most westerly of fifty-nine fortifications built in former years by the Tekke Turkmen along the fertile northward slope of the Kurren-Dagh. The fort, now abandoned,

is of a square form, with clay walls of sixteen feet in height enclosing a citadel with towers and cistern. The channel of the Attrek resembles that of the Oxus in every particular, though on a smaller scale, until its mouth is nearly reached, where the banks become low and flat and the river is surrounded by reedy saline swamps. The Turkmen say that the volume of the Attrek has greatly diminished of late so that in summer the river scarcely reaches the Caspian, and the ultimate fate of this river will probably be that of the Caspian arm of the Oxus.

The latest parts of the *Russische Revue*, an excellent periodical, in German, recently established in St. Petersburg, contain a valuable historical sketch of Khiva by M. Lerch.

Physiology.

Experimental Researches on the Functions of the Brain.—A valuable paper on the functions of the brain appears in the current number of *Virchow's Archiv* (lvii. 12) from the pen of Dr. Nothnagel, giving a provisional or anticipatory summary of the conclusions at which he has arrived. His experiments have been carried on in Prof. Heidenhain's laboratory at Breslau. The animals experimented on were rabbits, which, though in some respects inferior to dogs for the purpose, can readily be obtained in considerable numbers. Nothnagel, after discussing the advantages and disadvantages of the various methods that have been employed for determining the functions of different parts of the brain, such as the removal of parts by slicing them away, the section of portions with a fine knife through a small opening, and the application of electricity, proceeds to describe the following plan suggested to him by Prof. Heidenhain. He divides the skin of the head by a simple cut and perforates the skull with a boring instrument made from a microscope-needle. Through the hole thus made he passes the canula of a fine Pravaz' subcutaneous-injection syringe and injects into the desired part from quarter to half a drop of concentrated chromic acid; the canula is then withdrawn and the wound of the skin closed. Except in cases where the injection entered the ventricles of the brain, when death took place in from ten to thirty minutes, the animals lived as a rule from one to three weeks. Death within three days was of rare occurrence. When the acid penetrated the ventricles it ran through the foramen of Monro into the third and fourth ventricles of the brain; great retardation of the pulse and dyspnoea followed. After a time the frequency of the heart's action increased and general convulsion occurred which terminated in death. In cases where death took place after the lapse of about four-and-twenty hours post mortem examination showed that the part where the injection had penetrated was green and hard, so that sections could readily be made from it. When the animals lived a little longer there was developed around it a zone of inflamed brain of about one millimeter in breadth. Pursuing this method of examination Nothnagel injected acid in the first place into the hemispheres. He found the animal remained quiet during the operation and was subsequently lively and ate well. Its motility was apparently undisturbed, and no sensory disturbance could be detected. If the injection were made into the left hemisphere the right forefoot could be placed in any position, provided this were done slowly, without its being retracted, though similar attempts with the left forefoot were promptly resisted. The animal will sometimes remain in an abnormal position for several minutes. If the skin be slightly pinched the leg is however immediately retracted. When the animal lived over a week, or so this peculiar condition became less and less marked. There was no corresponding condition in the hind limbs. A similar experiment on a dog gave the same results. The explanation which M. Nothnagel regards as the most probable is that the animal has no ideal representation or only an incomplete one of the position of the extremity; in other words, there is partial paralysis of the muscular sense. He finds however from other experiments that there is no very strict localisation of mental functions in definite centres situated in the cortex of the cerebrum. Nothnagel finds lesion of the lenticular nucleus is always followed by motor paralysis but not necessarily by sensory. Injection into a definite point at the anterior and inner part of the corpus striatum (nucleus caudatus) gave the following results: For the first two or three minutes or even longer the animal remained quiet, but gave the impression of being conscious. Then without the slightest external irritation it began to leap either straight forward or performed the *mouvement de manège*. It made from four to eight leaps, then sat still for a few seconds, then leaped again, and so on, the movements being always hasty, the pause shorter and shorter till at length the movements became continuous, and after five to eight minutes it fell over on its side, the legs moving violently. In the course of a quarter or half an hour the animal was quite exhausted and lay apathetic. The point of the brain which when irritated produced these effects Nothnagel calls the *nodus cursorius*.

The Changes of Muscular Tissue after Section of the Nerves.—C. Bizzozero and C. Golgi in a paper on their researches which appears in *Stricker's Jahrbücher*, 1873, Heft 1, state that on the 10th January, 1870, they removed a long piece of the right sciatic nerve from a rabbit six months old. The tibiotarsal joint on the operated side gradually thickened, and after four or five weeks an ulcer made its appearance and the lym-

phatic glands swelled. In other respects the animal remained in pretty good health. On the 20th August a portion of the crural nerve was excised from the same limb. The animal seemed very well up to the 9th November. In December the ulcer had increased considerably and assumed an unhealthy aspect, and the animal soon died. On post mortem examination it was found to be very lean. The connective tissue of the whole lower extremity was infiltrated with serum. Ulcers had formed at various points and beneath them were cheesy deposits surrounded by a dense capsule of connective tissue. The stumps of the divided nerves were separated from each other by a considerable interval. The superficial muscles of the thigh had a pale rose tint; the deeper ones a yellowish red. The superficial muscles of the lower leg were greyish red and in parts yellowish, were rather hard to the touch, and were easily torn. The deep muscles, which had increased about one-third in thickness, presented a uniform yellowish colour and on section appeared smooth, uniform, and lardaceous. Microscopical examination showed that in the superficial muscles of the thigh there were scattered groups of fat-cells linearly arranged, which appeared to correspond to the course of the nerve-fibres. In the deep muscles of the thigh the muscular fibres were thin and the transverse striæ ill marked, and between the muscular fasciculi of the first and second order numerous very distinct zones of fat-cells were observed. In other parts the muscular substance of the individual fibres was partly torn in pieces and partly replaced by fat-cells. The superficial muscles of the lower leg presented in a very marked form the usual consequences of nerve-section, namely proliferation of nuclei in the muscle-corpuscles, atrophy of the fibres, increase of the interstitial connective tissue, and abundance of fat-cells between the muscular fibres. Lastly, in the deep muscles of the lower extremity, where the muscles were yellowish and like bacon, no trace of muscular tissue was visible; it appeared to be altogether converted into adipose tissue which might be compared with the panniculus adiposus. In transverse sections the fat-cells were rounded or polyhedral and resembled a mosaic. In longitudinal sections they were serially arranged, corresponding with the fasciculi.

Changes taking place in Inflamed Corneæ.—V. Pfungen has recently undertaken some interesting investigations in Stricker's laboratory and published his results in *Stricker's Med. Jahr.*, 1873, Heft 1. V. Pfungen passed threads through the centre of the corneæ of frogs and then examined the changes that took place in the cells by tinting them with gold or with silver and gold and placing them under a Hartnack's No. 10 immersion system. The precise method of preparation adopted in the latter case was to cut out the cornea and place it in a 5 per cent. solution of ordinary acetic acid in distilled water for a minute or two, in order to remove any blood that might be adherent as well as the anterior layers of epithelium. The cornea was then placed for five minutes in a one-half per cent. solution of silver, then replaced in the acetic acid solution for a minute or two, then immersed for ten minutes in the solution of gold, and finally for a few minutes in the acetic acid solution; the tissue was then carefully broken up. The chief result of his investigations is that he has determined that the pus cells of inflamed corneæ proceed from the nuclei of the ordinary fixed corpuscles.

The Reflex Movements of the Uterus.—A paper with this heading appears in *Stricker's Med. Jahrbücher*, 1873, Heft 1, by Dr. W. Schlesinger. Schlesinger and Oser some time ago showed that dyspænic arterial blood induced contraction of the uterus partly through the irritation of a nerve centre for the uterine nerves situated in the cranium and partly owing to the irritation of excitable tissues in the uterus itself. In the present investigation he has observed the effects of the electric excitation of the nerves of the spinal cord and has ascertained that electric excitation of the centric extremity of a divided dorsal spinal nerve causes general and energetic uterine movements in from five to fifteen seconds, the reflex action taking place through the cranial centre. Schlesinger was unable to corroborate Scanzoni's statement that irritation of the nipples causes uterine contraction, but he operated on very young animals. Schlesinger further shows that although excitation of the nervous plexus surrounding the aorta causes uterine contraction this is not the only path by which the motor impulses are conducted.

Prof. Gegenbaur, of Jena, whose Handbook to Anatomy is about to be translated, has accepted a call to Heidelberg.

Geology.

New Tertiary Mammals from the Rocky Mountains.—Prof. O. C. Marsh continues his description of new genera and species of tertiary mammals from the Rocky Mountains, collected during the recent expeditions from Yale College. The new genus *Tillotherium* possesses some remarkable dental characters differing from any yet described, but may probably prove to be nearly related to *Anchippodus*, if additional remains of that genus are discovered. *T. hyracoides* possesses two large incisors in each premaxillary, the inner and larger being gliriform, and subtriangular in transverse outline, the posterior faces being concave and covered on the front and outer surfaces with enamel. The canine is small and directed well forward. There are

four upper premolars increasing in size posteriorly, and three true molars, the last being the largest and all greater transversely than in antero-posterior dimension. They are composed of a pair of external cones, connected with a single internal lobe by two oblique converging ridges, and there is a small tubercle in the depression thus enclosed. The basal ridge on the posterior side is expanded, forming a low shelf, and the antero-external cone has an outer cusp which projects outward and forward. The lower jaws and skeleton are not yet known and Prof. Marsh believes that they may eventually prove to be identical with *Anchippodus minor*. The animal was about two-thirds the size of a tapir, and is from the Eocene of Wyoming. An examination of the remains of mammals allied to *Titanotherium* shows that two different animals have been hitherto referred to the species known as *T. Prouti*. The one now described under the name *Brontotherium gigas* differs from *Titanotherium* in having only three lower premolars, and is a true Perissodactyl, with limb bones resembling those of rhinoceros. Though generically distinct it is yet related to *Titanotherium* and Prof. Marsh unites the two genera under the family name *Brontotheriidae*. The remains of *B. gigas* are found to be those of an animal nearly as large as the elephant. The lower molars resemble those of *T. Prouti*, but the jaw is not so deep and its lower margin is straighter, descending but very slightly towards the angle. The incisors are small, the two next the symphysis being separated from each other, while there is a short diastema between the canine and first premolar. The other portions of the skeleton possess the following characters. The femur has a third trochanter, and its head a pit for the round ligament. The astragalus is remarkably short, and has a deep groove on its upper surface, and the articular facets for the navicular and cuboid are nearly equal. In the manus there are four short and thick toes, the first digit being rudimentary. There were three digits only in the pes, the first and fifth being wanting. The metacarpals and metatarsals are longer than in the elephant and the phalanges shorter. The carpal and tarsal bones are very short and form interlocking series. The tail is long and slender. The new species *Elotherium crassum* presents some features not observed hitherto in any Ungulates. There is a very long process descending from the malar bone, and giving attachment to the masseter muscle. It resembles the downward prolongation from the zygomatic arch in some Edentates and Marsupials, but is longer and more compressed. The radius and ulna are separate or very loosely united. The third and fourth metacarpals are nearly equal in size, and the second and fifth are larger than the corresponding bones of the pes. The hoof phalanges are short. This species is intermediate in size between *E. Mortoni* and *E. ingens* and like *B. gigas* is found in the Miocene of Colorado.—(*American Journal of Science and Art*, No. 30, 1873, p. 485.)

A New Fossil Bird from the London Clay of Sheppey.—At the last meeting of the Geological Society of London, held on June 25th, Prof. Owen described the skull of a dentigerous bird found in the London Clay of the Isle of Sheppey. The specimen consists of the brain-case with the basal portion of both jaws. The remarkable characteristic of this skull is the denticulation of the alveolar margins of the jaws. These denticulations are of two sizes, the larger ones being from two to three lines in length and separated by intervals of about half an inch, the smaller being about half a line in length and occupying the space between the larger denticles. They are all of a triangular or compressed conical form. Sections of these denticles seen under the microscope exhibit the unmistakable characters of avian bone. The total length of the skull, judging from the proportions of the parts preserved, would be between five and six inches, the length behind the fronto-nasal suture being two inches five lines. The author gives the name *Odontopteryx ioliapicus* to this fossil. The distance of the nostrils from the orbits, the absence of the superorbital gland pit, and other peculiarities point to the Goosanders and Mergansers as near allies, both of which have the beak strongly denticulated. In these, however, the denticular processes are on the horny bill only, so that this modification of the alveolar margin of the jaws is peculiar to *Odontopteryx*. Prof. Owen considers "that *Odontopteryx* was a warm-blooded, feathered biped, with wings; that it was web-footed and a fish eater; and that in catching its slippery prey it was assisted by this pterosaurid armature of the jaws."

The Volcanoes of Ecuador.—Wolf, in a letter to Prof. vom Rath (*Zeitschrift der deutschen geologischen Gesellschaft*, vol. xxv. part 1, p. 102) describes some of the lava streams in the vicinity of Quito, Ecuador. He states that it is erroneous to suppose that these volcanic mountains consist almost entirely of a homogeneous trachyte, for wherever he has examined them he has found the lava streams made up almost entirely of varieties of Andesite. These streams are exceedingly numerous and constitute the bulk of the volcanic rocks of the country. At Langlangchi the lava forms a high perpendicular wall which appears to be the end of a stream reaching to the plateau of Riobamba. It exhibits very beautiful columnar structure, and consists of Andesite, which at the bottom and towards the middle possesses a porphyritic texture, becoming gradually more compact and darker in colour until at the surface it passes into a porous slaggy lava. It has a height of nearly thirty metres and a breadth of nearly a mile. Going from Langlangchi over Lican to Chimborazo, one traverses several extensive lava streams, while at

Tunguragua there are two of these streams as fresh in appearance as if they had flowed but a few days since. All the Ecuador volcanoes, Chimborazo not excepted, exhibit numerous lava streams. Not to mention the older perlite and obsidian streams of the same volcano, it would be difficult to find in any part of the world a more beautiful example than that presented at Antisana, which probably flowed in the last century. The whole foot of Chimborazo is surrounded with radiating streams of a black porous lava exhibiting columnar structure, and in some instances consisting of a clear compact Andesite. The mountain of Imbabura is built up entirely of columnar lava and all the smaller volcanoes in its vicinity have long and broad lava streams. All these streams contain numerous varieties of Andesite, and in most cases Wolf has observed them to have their origin in the sides or foot of the mountains and not at the crater summits.

Botany.

Classification and Geographical Distribution of Compositae.—The last part of the *Journal of the Linnean Society* contains Mr. Bentham's long-promised paper on the Compositae, to which we have already alluded (*Academy*, vol. iii. pp. 73, 152). He divides this enormous order, the largest and most natural in the vegetable kingdom, into thirteen primary divisions, viz., 1. *Vernoniaceae*, 2. *Eupatoriaceae*, 3. *Asteroidae*, 4. *Inuloidae*, 5. *Helianthoidae*, 6. *Helmioidae*, 7. *Anthemidaceae*, 8. *Senecionidaceae*, 9. *Calendulaceae*, 10. *Arctotidaceae*, 11. *Cynaroideae*, 12. *Mutisiaceae*, and 13. *Cichoriaceae*; the main characters relied on being the differences in the sexual arrangements, in the pistil (but only in the hermaphrodite flowers, where its sole function appears to be that of sweeping the pollen out of the anthers), in the androecium, in the corolla, and in the calyx (pappus). The relations of these subdivisions to one another, both structurally and in their geographical distribution and probable genetic connection, is traced out with very great care; and the probable history of the order is thus summed up:—Africa, West America, and possibly Australia, probably possessed the order at the earliest recognizable state, Andine America showing what may be considered the nearest approach to the primitive form of the order. These regions had probably at that time some means of intercommunication, and it was only at a later period that the Compositae began to disappear from the tropical regions, which henceforth placed an impassable barrier between the northern and southern hemispheres. Those more or less differentiated races which had reached and accommodated themselves to high northern latitudes or mountain altitudes retained some means of communication between the Old and the New World long after it was broken off in the warmer parts of the globe. The homes where the Compositae now flourish in the greatest luxuriance as regards specific variety and individual numbers appear to be—Tropical America exclusive of the great alluvial low-lands and forest regions, the United States, South Africa, the Mediterranean region, West Central Asia, and extra-tropical Australia.

Concealed Chlorophyll in Plants.—M. Prillieux (*Comptes Rendus*, June 26th) discusses the structure of the bird's-nest orchis (*Neottia nidus-avis*), which is generally considered a non-parasitic plant not containing chlorophyll. He observed that if a plant is placed in alcohol it turns green and then imparts that colour to the alcohol. Under the microscope it is seen that the brown colour of the petals is due to small elongated brown bodies scattered without order through the cells and grouped round the nucleus in each cell. These bodies have the power of swelling and are what he regards as proteinaceous analogues of crystals. The application of alkalis or acids, or even of heat, immediately turns them green, and any re-agent which dissolves chlorophyll itself in like manner becomes green. M. Prillieux believes, however, that chlorophyll does not exist as such in the living plant, the most careful experiments showing no disengagement of oxygen, but rather of carbonic acid; the chlorophyll is probably rather a product of the action of the re-agents applied. The tissues contain abundance of starch, which they probably absorb in that state.

New Publications.

- AUDOUIT, E. *Les Plantes curieuses*. Paris: Martinet.
 BAYER, L. *Die Zahn cysten der Kiefer*. Tübingen: Fues.
 BRIEGER, Dr. A. *Beiträge zur Kritik einiger philosophischen Schriften des Cicero*. Posen: Jolowicz.
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 CAIRNES, Prof. J. E. *Political Essays*. Macmillan.
 CHALLIS, J. *An Essay on the Mathematical Principles of Physics with reference to the Study of Physical Science*. Deighton, Bell, & Co.
 CLAUS, C. *Zur Kenntniss des Baues und der Entwicklung von Branchipus Stagnalis und Apus Cancerformis*. Göttingen: Dieterich.
 DE QUATREFAGES, A. et HAMY, E. T. *Crania ethnica. Les crânes des races humaines, décrits et figurés d'après les Collections du Muséum d'Histoire Naturelle de Paris, de la Société d'Anthropologie de Paris, et les principales collections de la France et de l'étranger*. 1^{re} liv. feuilles 1 à 6. Paris: Baillière.

- DIAMILLA-MULLER, E. *Lettre scientifique per il popolo italiano*. Let. IX. Le aurore polari. Milano: Dumolard.
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 FICK, A. *Arbeiten aus dem physiologischen Laboratorium der Würzburger Hochschule*. 2 Lief. Würzburg: Stahel.
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 KORNHUBER, A. *Ueber einen neuen fossilen Saurier aus Lesina*. Wien: Braumüller.
 KRAUS, H. *Ueber das Vorkommen von Stärkemehl in den Siebröhren der Pflanzen*. Halle: Schmidt.
 LASSWITZ, K. *Ueber Tropfen welche an festen Körpern hängen und der Schwerkraft unterworfen sind*. Breslau: Koebner.
 MAERCKER, H. *Ueber die Methode der Stickstoffbestimmung in organischen Körpern*. Halle: Schmidt.
 MAGITOT, E. *Mémoire sur les kystes des mâchoires*. Paris: Asselin.
 NASSE, H. *Weitere Untersuchungen über den Stickstoff der Eiweisskörper*. Halle: Schmidt.
 QUENSTEDT, F. A. *Petrefactenkunde Deutschlands*. 3 Band, 1 Abtheil. Echinodermen. 2 Heft. Leipzig: Fues.
 REDTENBACHER, A. *Die Cephalopodenfauna der Gosauschichten in den nordöstlichen Alpen*. Wien: Braumüller.
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 SCHRAMME, C. *Das Wärmespectrum der Sonne*. Wien: Dirnböck.
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 STOPPANI, A. *Corso di geologia*. Vol. II. Fasc. VIII. Milano: Bernardoni.
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 VON PETTENKOFER, M. *Vorlesungen*. 1 und 2 Hefte. Braunschweig: Vieweg und Sohn.
 WELLS, J. C. *The Gateway to the Polynia. A Voyage to Spitzbergen*. H. S. King & Co.

Philology.

The Vamgabrahmana (being the eighth Brāhmaṇa) of the Sāmaveda. Edited, together with the Commentary of Sāyana, a preface and index of words, by A. C. Burnell, M.R.A.S., &c., &c. Mangalore. 1873. (pp. xliii., 12, and xii.)

THE main interest of this little volume consists in the preface. The Brāhmaṇa itself, together with its commentary, occupies no more than 12 pp., and, as the editor tells us, is a mere list of names of the successive teachers of the Sāmaveda, the lowest in the list appearing to be those of historical persons, —though there is nothing to indicate to what period they belong—while the earlier names are purely mythical.

In the preface, among other matters, Mr. Burnell discusses the question whether the celebrated mediæval Indian scholar Sāyana, who composed the well-known commentaries on the hymns of the Rigveda and on different Brāhmaṇas, was the younger brother of Mādhava, to whom other works of the same description are ascribed, or whether the two persons were identical. On this and other points connected with Sāyana he adduces a number of particulars which, to me at least, are new; and arrives at the conclusion that the two names denote one and the same individual. According to the Telugu Brahmins, as Mr. Burnell tells us, Sāyana was perhaps the son of Māyana; and he was probably an only surviving child, who received the name he bore (which is more properly Sāyana, and is a pure Dravidian word signifying "mortal") as one of those names which are given by parents in Southern India who have lost several children to

a child subsequently born, with the view of propitiating the malignant powers which are supposed to have destroyed the others. His real name as a Brahman, however, was Mādhavāchārya, who took the appellation of Vidyāranya Svāmin. If he had brothers the name of Sāyana shows that he must have been the eldest ("anna" [= elder brother] being an ordinary honorific complement of South Indian names). It is further urged by Mr. Burnell that, in a verse of the Pārāśarasmritivṛkhyā, Mādhava says of himself that Śrīmatī was his mother, Māyana his father, Sāyana his "lord of enjoyment" (*bhoganātha*), and Manas and Buddhi (the perceptive and reasoning faculties) his brothers. The term "lord of enjoyment," as Mr. Burnell believes, receives its explanation from the Vedānta philosophy, in conformity with which Mādhava is the soul, which is one with Viṣṇu (who in one of his incarnations has Mādhava for one of his names) and becomes clothed with a human body, through which sensual impressions are received, and which is called *bhoga-yatanam* or *bhogasādhana*, the "abode of" and "means to" sensual impressions, but is here personified as the "lord of enjoyment, or of sensual perceptions." In support of his view, Mr. B. quotes another verse where Mādhava, "having the body of (or embodied in) Sāyana," is said to have expounded the Vedas; and two more, in which Mādhava is described as the kaustubha gem produced from the Sāyana-milk-ocean, and the names of Sāyana and Mādhava are associated in one compound word—in which the dual form is not employed, as it might have been expected to be if two distinct persons had been intended. Another verse which speaks of Mādhava as suggesting to King Bukka that his own learned younger brother Sāyana should be commissioned to interpret the Vedas—and which therefore appears to militate against the identity of the two—is understood by Mr. Burnell to signify that Mādhava here refers to himself as the soul, which is eternal, and necessarily anterior to the body,—here represented by Sāyana—which was produced in time. And he repeats that, as above explained, Sāyana can only be the name of an elder brother. Lastly, it is remarked that whereas, in the earlier Vedic commentaries of this author, King Bukka is said to have commanded Mādhava to compile these works, whilst in the colophons they are spoken of as the work of Sāyana, in the later commentaries it is more consistently stated that they were ordered to be composed by Sāyana, who also appears in the colophons as the author.

The praise of ingenuity cannot be refused to these arguments, and they further appear to me to possess great force. It would, however, perhaps be premature to pronounce whether or not they are absolutely conclusive until they shall have been examined by other Sanskritists, and until it shall appear whether any other data bearing on the solution of the question are forthcoming or not.

Sāyana became, as Mr. Burnell relates, the ascetic head of an important religious sect founded by the famous Śaṅkara Achārya, the chief monastery of which was Satringeri, in Southern India, where his successor in the government of the order still resides. Here he had abundant leisure for the composition of voluminous works, which are enumerated by Mr. B., the chief period of his literary activity appearing to range from 1350 to 1380 A.D. Mr. Burnell states that a revival of Vedic studies seems to have commenced about 800 A.D., and to have lasted not much beyond 1500; and he considers that the appearance of Sāyana's earlier works induced the pious Hindu sovereign Bukka to commission him to expound the Vedas, a plan which formed part of the measures which he took to restore Hinduism, and which Sāyana nearly completed. Mr. B. is of opinion that the works which pass under Sāyana's name were really written

by him, and that there are no grounds for supposing that he lent his name to the compositions of others. The inconsistency discoverable between the interpretations which he has given in different books is to be explained by the nature of the works; and circumstances rendered it impossible for him to be a consistent critic. The Vedānta, which he explained, is in contradiction with the old Vedic religion; and as Sāyana proceeded on the erroneous assumption that all the Vedic texts are in harmony with each other, he could not, when proceeding on this hypothesis, do otherwise than pervert the sense of some of them in his expositions. The productions of his predecessors in the same field, including the remains of the ancient etymological school of Yāska, constituted, according to Mr. B., the principal source from which Sāyana compiled his own works; though as regards the books which he consulted for his Rigveda Bhāṣya but little information remains.

After examining the pre-existing materials which the commentator who is the subject of his discussion appears to have had at his disposal to aid him in his interpretation of the Vedic hymns, Mr. B. comes to the following conclusion: "The great controversy which has prevailed so long respecting Sāyana's competence to explain the Vedas is fast approaching its end: the above sketch of his life and works will show that the followers of the 'German school' are historically right. That they are so theoretically is established by an amount of proof," offered by the scholars whom the writer proceeds to name, "that has long vanquished all reasonable hesitation on the part of the Sanskritists who were once inclined to prefer Sāyana and Indian precisians to the results of comparative philology."

I may explain that the "German school" consists of those Sanskritists who maintain, in opposition to the late Professors H. H. Wilson and Goldstücker, that, in interpreting the ancient hymns of the Veda, European scholars ought not to regard themselves as bound by the expositions of Sāyana (who often gives alternative, and consequently, in his own view, dubious, explanations, and who viewed the ideas of the ancient poets in the light of his own age); but, while accepting all the aid that the Indian commentator can afford, should endeavour to elicit the real sense and spirit of those hymns by the help of the context, by a comparison of parallel passages, by transplanting themselves into the remote past and seeking to think its thoughts, and by the other improved methods of modern philology.

From the preceding summary of its contents, it will be manifest that Mr. Burnell's preface forms an extremely interesting and important contribution to the literary history of mediæval India.

J. MUIR.

The Dialect of the Southern Counties of Scotland. By J. A. H. Murray. London: Asher & Co. 1873.

MR. MURRAY'S work consists of two distinct portions—(1) the historical introduction, (2) the phonology and grammar of the modern dialects. We will consider them separately. The most important of the general results of Mr. Murray's historical investigations is the confirmation they give of the view first advanced, we believe, by Mr. Garnett, that the Scotch dialects are essentially a subdivision of the old Northumbrian, which in the fourteenth century was spoken as one homogenous language from the Humber to the Forth; they are in short *English* dialects—quite as much so as the popular speech on the other side of the Tweed. Mr. Murray says: "I have repeatedly been amused on reading passages from Cursor Mundi and Hampole to men of education, both English and Scotch, to hear them all pronounce the dialect 'old Scotch.' Great has been the sur-

prise of the latter especially, on being told that Richard the Hermit wrote in the extreme south of Yorkshire, within a few miles of a locality so thoroughly English as Sherwood Forest, with its memories of Robin Hood." Indeed, down to the end of the fifteenth century the Lowland tongue is never once called "Scotch," but always "Inglis"—

"Lykly he was, manlik of contenance,
Lik to the Scottis be mekill governance
Sauf of his tong, for Ingliss had he nane,"

is said of Wallace's French friend Longueville.

One curious result (already pointed out by Garnett) of the identity of old Scotch and Northern English is that earlier Scotch philologists, especially Jamieson, claimed all the northern romances as Scotch, and thus practically ignored the Northern English altogether. They then, as Mr. Murray observes, proceeded to compare their old Scotch with purely Southern writings such as Layamon, and on the strength of the distinctions of spelling and inflexion that manifested themselves, claimed for the Scotch an origin independent of Anglo-Saxon, which origin they sought either in Pictish or in Jamieson's favourite "Suio-Gothic."

We must, *en passant*, protest against Mr. Murray's assertion that the dialectology of the thirteenth and fourteenth centuries "was all but a *terra incognita* when taken up by Dr. Richard Morris." Many people nowadays seem to have a vague impression that English philology had no existence at all before the appearance of Dr. Morris and the Early English Text Society. The fact is that if we subtract from the views now current on the Early English dialects the large amount of pure guesswork that they contain, we shall find that nearly all the results of real importance embodied in them were perfectly well known to Garnett and his fellow-students, Madden and Guest, long before any of the editors of the Early English Text Society were heard of.

It is a significant fact that the oldest specimen of the language of the North Angles—perhaps the oldest specimen of *any* English dialect we possess—belongs to Scotland. This is the Runic inscription on the Ruthwell cross in Dumfriesshire, which can hardly be of later date than the beginning of the eighth century. Mr. Murray gives it in full from Professor Stephen's text. After the Durham-book glosses of the tenth century the history of the Northern dialect in Scotland can only be traced in isolated words occurring in the Latin laws of David I. and his successors, such, for instance, as "*Si quis verberando fecerit aliquem blaa et blodi, ipse qui fuerit blaa et blodi debet prius exaudiri.*"

Beginning then with the fourteenth century Mr. Murray divides the language into three periods:—

(1) The *early*, up to about 1450, in which the literary use of the northern dialect was common both to Scotland and England.

(2) The *middle*, 1450-1700, during which the literary use of the dialect was confined to Scotland. This period is characterised by certain phonetic changes, and by strong French influence.

(3) The *modern* period, in which the literary use of the northern dialect ceased in Scotland also, so that it only survived as the speech of the common people.

In treating of the peculiarities of the middle period Mr. Murray has satisfactorily explained the puzzling confusion of *a* and *ai*, *o* and *oi*, &c., in the same words (*tail*, *rois* = *tale*, *rose*), by showing that the *i* was simply a mark of length, resulting from a defective pronunciation of original *ai*, &c., in which the second element sank to a mere vocal murmur, so that *aa* and *ai* came to be almost undistinguishable in sound, and were therefore interchangeable. This change, together with that of *wh* into *f* in the north-east dialects, and the dropping of initial *th* in

at *that* (the *màn at was heir*) are explained by Mr. Murray as due to Celtic influence. These questions of the influence of one language on another offer peculiar difficulties, because of the possibility of the same phenomena developing themselves independently, but Mr. Murray seems to have made out his point satisfactorily in these three cases. He has, at any rate, clearly proved the superior claims of Celtic over Norse influence as regards *at* for *that*, showing that on the Gaelic border the loss of initial *th* extends to *all* unemphatic words, which is not the case in Norse. In one case we must consider the Celtic influence as more than doubtful—in that of the triple use of *thys*, *that*, and *yon* in the senses of the Latin *hic*, *iste*, *ille*, which Mr. Murray asserts to be non-Teutonic. He must surely have forgotten Dutch, which uses the same three words (in Dutch *dit*, *dat*, *geen*) in exactly the same way. There is therefore no necessity for calling in the very different Gaelic forms *an* (*duine*) *so*, *an* (*duine*) *sinn*, *an* (*duine*) *ud*, as Mr. Murray has done: we must rather assume that the distinction was developed independently by all three languages.

In treating of the third period Mr. Murray makes some very interesting remarks on the revival of the Lowland Scotch in the works of Scott and Burns. He makes out the modern literary Scotch to be a thoroughly artificial and conventional language. Not only is the spelling anglicised, but the grammar and vocabulary has also been greatly corrupted by the influence of the literary English. And while Scott and Burns have thus unconsciously anglicised their native idiom, other writers have done so consciously and systematically, regarding all deviations from the literary standard as "bad grammar." As an example of this "fancy Scotch" Mr. Murray quotes "Scots wha hae wi' Wallace bled," which is a mere *transliteration* of the English "Scots who have:" the genuine Scotch would be "Scots at haes."

We may now turn to the phonology and grammar of the living dialects, which Mr. Murray divides into three principal groups—the north-eastern, central, and southern. The last, as spoken in Teviotdale, is Mr. Murray's native dialect, and on it his observations are principally based. The value of these observations is greatly increased by their being expressed in a rigorously consistent and minutely accurate phonetic notation, based on the traditional Scottish orthography, the formation of each sound being carefully explained with references to Mr. Bell's *Visible Speech* and Mr. Ellis's *Palaotype*. Mr. Murray is justly severe in his condemnation of the slovenliness of most writers on dialects in matters of pronunciation and notation: "It is a matter of deep regret that nine-tenths of what has been written in or on the dialects is, for philological purposes, positively useless, from the want of any clear explanation—often of any explanation whatever—of the values which the writers have attached to the combinations of letters employed by them. It cannot too often or too loudly be repeated that words are combinations of *sounds*, not strings of *letters*, and that to attempt to describe an unknown language or an unknown dialect by spelling its words in such and such a manner, without rigidly defining the values attached to the letters, is as futile as it would be to represent to us a landscape with its various parts not only uncoloured, but labelled with the names of their divers hues and shades in an unknown tongue."

It will give some idea of the delicate sound-distinctions of the Scotch dialects to know that Mr. Murray finds it necessary to distinguish *nine* instead of merely *three* degrees of tongue elevation in the case of some of the vowels. Thus, in the front vowels he recognises, besides the normal mid primary (*e*), a higher vowel (*è*), between (*e*) and (*i*), and a lower (*è*). The higher is the Edinburgh, the lower the Teviotdale sound. The peculiar vowel in *hill*, *bit*, &c., is

identified by Mr. Murray with the wide sound of the Edinburgh (*h*): *hill* is therefore *hēl*.

It is clear that Mr. Murray would not agree with the dictum of a well-known German dialectologist, who saves himself the trouble of giving an accurate and intelligible account of the sounds of his dialect by laying down the principle that no shades of pronunciation must be recognized which cannot be expressed by the letters of the Roman alphabet in their conventional acceptation. The only sound principle is, of course, to note every distinction that can be heard and analysed, and not to dogmatise till a few more trustworthy observations have been made.

It is impossible to follow Mr. Murray through the details of his masterly analysis, although many of them are of the highest interest. Such are the remarks on the palatalization and labialization of the guttural *ch* (peculiar to the southern dialect), and the light they throw on the history of the same sound in the literary English. Another peculiarity of the dialect—the diphthongization of final *ee* and *oo*—is also of great value as illustrating the development of diphthongs generally. Finally we may mention archaisms, such as the preservation of *w* not only before *r* in *w'rang*, &c., but also before *l* in the word *w'lisp*, which last Mr. Murray has heard in his childhood from old Teviotdale villagers.

The grammar fully maintains the high character of the earlier portions of the work: the details of inflexion and syntax and of the use of the auxiliaries show the same unique combination of historical research and keen appreciation of the features of the living language. Mr. Murray entitles this part of his work simply a "Grammar of the Southern Scottish Dialect:" it would be almost nearer the truth to call it an "Historical Grammar of Northern English." Errors which have been handed down unquestioned from the days of Garnett and his contemporaries are here cleared up. The general assumption, for instance, that the inflexion of the present tense of the thirteenth century Northumbrian verb was *s* throughout is corrected by Mr. Murray, who shows that the thirteenth century usage was the same as that of modern Scotch, in which the *s* of the plural is dropped when a verb is accompanied by its proper pronoun, although retained in other cases: *thay syt*, but *the men syts*.

It is to be regretted that the dialectical specimens given in the appendix are so scanty: they consist only of the Book of Ruth in Teviotdale, accompanied with renderings of the first chapter into the Buchan and Ayrshire dialects, to represent the two other groups. We hope Mr. Murray may be induced to crown his work by preparing a much fuller Chrestomathy of his native dialect, for which there must surely be material extant in the shape of popular traditions, songs, proverbs, &c., together with a complete dictionary. Scotch patriotism, which is too often wasted in high-flown declamations about Wallace and Bruce, might find a rational outlet for its superfluous energy in forwarding the completion of so truly national a work.

HENRY SWEET.

Intelligence.

Mr. George Smith, whose archaeological mission to Mesopotamia will be in the recollection of our readers, returned to England on the 19th inst. The three boxes of antiquities which he had prepared to bring were detained by the governor of Alexandretta, but have since been released by an order from Constantinople, and are on their way to this country. Mr. Smith has found portions of the Deluge-tablets completing the text, parts of cylinders of Assur-bani-pal Sennacherib and Esarhaddon, and many fragments of tablets already in the collection of the British Museum. We look forward with interest to Mr. Smith's detailed report, as he has been through the length and breadth of the land, and examined many mounds and sites for the first time.

We have just received from Dr. Bleek his Report of Researches into the Bushman Language presented to the House of Assembly of the Cape

Colony. The comparatively scanty materials for studying the language were largely increased by the presence of two Bushmen, who have been with Dr. Bleek for two years and a half, and if possible will remain for at least a year and a half longer. He has taken down from their lips more than 4000 columns (half pages quarto) of text, besides a dozen genealogical tables, and other genealogical, geographical, and astrological notices. The main importance of this Bushman as well as of the Hottentot literature consists in the myths, in which animals and heavenly bodies are personified. The so-called Bantu nations (Kafirs, Betsuana, Damara, &c.) have legends, but, strictly speaking, no mythologies. The Bushman language has lost, if it ever possessed, those signs of gender which are so clearly marked in Hottentot. It is also distinguished from the latter by the irregularity of the forms of the plural, of which at least fifty or sixty are in existence. On the other hand, there are many similarities of structure (e.g. the vocative; the exclusive form of the prefixed pronoun of the 1st pers. plural, i.e. that which excludes the person addressed; the relative form of the verb; the reduplication of the stem, so as to give the verb a causative or transitive meaning, &c.). There are also a good many words which seem to be of common origin. But as the principle of the correspondence of sounds has not yet been ascertained, no comparison can be at present instituted on a scientific basis.

The *Centralblatt* for July 12 contains a warm testimony from one of the highest authorities ("Fl.") to the linguistic merits of M. Vambéry's *Ungarische Sprachmomente*. The same journal not long ago contained a slightly too severe examination of the same author's *Geschichte Bokhara's* by a scarcely less eminent historical critic ("A. v. G.").

At their meeting of July 18 the "Académie des Inscriptions et Belles-Lettres" awarded the ordinary prize for 1873 (value 2,000 fr.) to M. Abel Bergaigne, tutor of Sanskrit at the "École pratique des Hautes Études." The subject of the competition was a comparative study of construction in the Indo-European languages.

Contents of the Journals.

The China Review, edited by N. B. Dennys. Vol. I. No. 2. Sept. and Nov., 1872.—The Emigration Convention of 1866. [Code of regulations agreed to by Sir Rutherford Alcock and Prince Kung on the rights and duties of Chinese emigrants.]—The Adventures of a Chinese Giant. [Translation from the Chinese, by H. S., continued.]—The Manchu Conquest of Canton; by E. C. Bowra. [The conquest of China by the Manchu, the present dominant race, dates from 1644. There have been eight sovereigns since, including the reigning monarch. Canton does not seem to have been invaded until 1647 and wrested from the Ming's till some years later. The account here given is drawn from Chinese and European sources.]—Rhymes from the Chinese; by A. Lister. [Fourteen poems from a Chinese novel *Yü Chiao Li*.]—From Gotham to Cathay, via the Great West [continued].—M. Julien's *Syntaxe de la Langue Chinoise*; by A. Falconer. [Highly favourable review. "The deep scholarship it displays is remarkable, and the ease and originality with which the knotty problems of Chinese grammar are handled are perfectly astonishing, when we remember that M. Julien has never had the advantage of residing among the people." &c.]—Roman and Chinese Coinage; by S. W. Bushell. [Stone moulds, as used for early Roman copper coins, have been employed by the Chinese from the introduction of bronze coins to the present time. The typical circular coins were first circulated at the beginning of the Chou dynasty in the twelfth century B.C. The emperor Ching Wang (B.C. 543-518) increased the size and weight of the coinage: one of the existing moulds is referred to his time; whilst there are many extant of the Han dynasty (B.C. 202-A.D. 221).]—Mr. Wade on China. [Translated from an unpublished State paper, by H. E. Wodehouse; concluded.]—The Port of Hai-K'ou; by F. Hirth. [Account of the trade of that port, in the island of Hainan, which is expected to be opened shortly. The chief imports are opium, Shanghai cotton, hemp, shirtings, and tobacco; whilst sugar and oil are the two principal exports.]—The National Monuments at Yai-shan; by E. C. Bowra. [At this place, on the Canton river, the adherents of the Sung prince made a last stand against the advancing Mongols, in 1278, but were defeated and exterminated. The paper gives an account of the place and the temples erected on the spot.]—Short Notices of New Publications and Literary Intelligence.—Notes and Queries.

No. 3. November and December, 1872.—The Emigration Convention of 1866 [concluded].—The Adventures of a Chinese Giant [continued].—The Symbols of the Yih-king; by Rev. Canon McClatchie. [The writer tries to connect the ancient nature worship and demonolatri of the Chinese with those of the Western nations. He fancies that when the three tribes of Shem, Ham, and Japhet separated they brought away copies of ancient records from which the various sacred books of the heathen world were afterwards compiled (!).]—The Colony of Hongkong; by Jas. Legge. [From a lecture "On Reminiscences of a Long Residence in the East." An interesting description of Hongkong.]

—Chinese Medicine; by J. G. Kerr. [Account of the Chinese notions of anatomy, physiology, and chemistry. Their analysis of the human system is shown to be fanciful. The fact of the circulation of the blood seems to have been known to them in ancient times; air and blood are supposed to permeate the body, but in tubes which have only an imaginary existence.]—Chinese Philology; by J. Edkins. [The writer warns against the tendency of "modernizing," or lowering the antiquity of Chinese history. He defends his principles of Chinese comparative philology and insists on the historical and dialectic changes of the sounds of the language.]—From Gotham to Cathay [continued].—Notes on Chinese Mahometan Literature; by T. Watters. [According to Chinese authorities the first Arabians went to China in the seventh century of our era. Under the Mongol dynasty large numbers of Mahometans were already settled in various parts of China. They have never been prosecuted in the way in which Buddhists and Christians were. An account of their literature is to follow.]—The Song of the Cloud Table on Mount Hwa; by J. Chalmers. [English and Chinese.]—Short Notices of New Books.—Notes and Queries.

No. 4. January and February, 1873.—Taoism, by J. Chalmers. [After a brief comparison of the three forms of doctrine in China, Confucianism, Taoism, and Buddhism, the writer proceeds to analyze the tenets and speculations of Lau-tsze, the originator of the system of Tau, and a contemporary, it is believed, of Confucius.]—The Adventures of a Chinese Giant [concluded].—The Manchu Conquest of Canton [concluded].—Chinese Almanacs; by A. Lister. [Account of two Chinese almanacs, with suggestions to keep up a continual comparative Anglo-Chinese calendar, as those for 1776-1876 published by Mr. P. Loureiro, and 1860-70 by Mr. W. F. Mayers.]—The Small Knife Rebels; by G. Hughes. [Account of a rebellion of a politico-religious society, called the Dagger Society, against the Mandarins and soldiery of Amoy, in 1853. The rebels occupied the city for rather more than four months.]—Chinese Verse; by C. T. Gardner. [Translations of various bits of poetry.]—The Manufacture of Canton Matting; by F. Hirth. [This texture is made from reeds, said to be the *arundo mitis*, but probably of several species. Their natural colour is greenish white, but becomes white in use without being bleached. To produce different patterns, they are dyed.]—From Gotham to Cathay [concluded].—Confucianism; by E. J. Eitel. [Favourable review of E. Faber's *Lehrbegriff des Confucius*, Hongkong, 1872.]—Topography of the Department of Chiung Chou Fu, or the Island of Hainan; by F. Hirth.—Notices of New Books.—Notes and Queries.

New Publications.

- ADAM. Grammaire de la langue mandchou. Strassburg: Berger-Levrault.
- ANGERMANN, C. Th. Die Erscheinungen der Dissimilation im Griechischen. Leipzig: Hirzel.
- BÉLAMY, Th., et HUMBERT. Recueil de noëls anciens en patois de Besançon. 3^e édition, corrigée, &c. Suivie des Noëls en patois de Vauclaus. Besançon: Marion.
- BRINK, Dr. Jan ten. De schoonzoon van Mevrouw de Roggeveen. Amsterdam: Schadd.
- COLEBROOKE, Sir T. E. The Life of H. T. Colebrooke. Vol. I. Trübner.
- FICK, A. Die ehemalige Spracheinheit der Indogermanen Europa's. Göttingen: Vandenhoeck u. Ruprecht.
- FUNKHÄNEL, K. H. Vergleichung der Schriften Cicero's u. J. Grimm's ü. das Alter. Eisenach: Bacmeister.
- GRIMM, J. u. W. Deutsches Wörterbuch. 4 Bd. 2 Abth. 6 Lfg. Bearb. v. M. Heyne. Leipzig: Hirzel.
- HITZIG, H. Beiträge zur Texteskritik des Pausanias. Heidelberg: Groos.
- LANGE, R. De Xenophontis quae dicitur apologia et extremo commentariorum capite. Berlin: Mayer und Müller.
- LOEWE, H. Symbolae ad enarrandum sermonem poetarum latinorum. Pars II. De elocutione Vergilii. Grima: Gensel.
- MADVIGIUS, J. N. Adversaria Critica ad Scriptores graecos et latinos. Vol. II. Leipzig: Weigel.
- PERLES, J. Zur rabbin. Sprach- und Sagenkunde. Breslau: Skutsch.
- PLATONIS Gorgias. Ed. R. B. Hirschig. Utrecht: Kemink und Sohn.
- PLINII SECUNDI, C., Naturalis historia. D. Dettelsen recensuit. Vol. V. Berlin: Weidmann.
- RAUMER, R. v. 4. Fortsetzung der Untersuchungen ü. die Urverwandtschaft der semitischen u. europäischen Sprachen. Frankfurt a. M.: Heyder und Zimmer.
- SASS, F. De num. ro. plurali. Kiel: Haeseler.
- SCHAAFSCHMIDT, U. De *et* praepositionis apud Pausaniam periegetam vi et usu. Leipzig: Abel.
- SCHOLTE, A. Observationes criticae in Saturas D. Junii Juvenalis. Utrecht: Kemink und Sohn.

SCHOTEL, Dr. G. D. J. Vaderlandsche volksboeken en volkspraakjes van de vroegste tijden tot het einde der 18^e eeuw. Haarlem: Kruseman.

XENOPHON'S Hellenica. Erklärt v. L. Breitenbach. 1 Bd. Berlin: Weidmann.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 77.

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REGISTERED FOR

FRIDAY, AUGUST 15, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Songs of the Sunlands. By Joaquin Miller. Longmans. 1873.

RATHER more than two years ago Mr. Joaquin Miller surprised and delighted the world with a volume of poems which were both new in subject and fresh in style. His descriptions of the sun-bathed scenery of Mexico and California, the bold poetic myths which proved his sympathy with nature in her sublimity, and his pictures of life and passion far removed from the experience of the Old World, were so attractive that it was impossible not to feel that a new poet rich in youthful genius had appeared. Though the warmest admirers of *Songs of the Sierras* might confess that Mr. Miller was deficient in dramatic force and not free from imitations of Byron and more recent lyrists, yet even his severest critics could not deny that he possessed the faculty of imaginative description, vigour of language, melody of rhythm, and what is called originality—the power to apprehend and utter after a fashion of his own. These were no insignificant qualities in a poet who had besides at his command the wild tales and the gorgeous landscape of Southern America. Nor was there any reason to doubt that Mr. Miller's defects might be corrected and his true excellence as a lyrist and *raconteur* be strengthened by growth and study. Yet it must now at the outset be admitted that in the volume before us his old gifts, though still remarkable, have rather run to seed, while his faults of imitation and incompleteness have been confirmed. It is a pity for example that a poet who claims to have chosen only the primeval forces of nature for his masters (see pp. 51, 53) in silence and in song, should have adopted the exquisitely artificial rhythms which Mr. Swinburne has made his own, without at the same time taking the trouble to acquire Mr. Swinburne's art. Disregard of rhyme and metre and language may do well enough in the style of a poet who echoes the fitful Æolian music of the pine-woods of Yosemite; but we cannot welcome *Cyprus and spices, Judah and beauty, other and heather*, in stanzas of which this is a specimen :

"In the place where the grizzly reposes,
Under peaks where a right is a wrong,
I have memories richer than roses,
Sweet echoes more sweet than a song."

It is not difficult to write nonsense verses in this metre. Any literary man can turn out scores of stanzas like the following, which indeed are far from being Mr. Miller's, but are introduced here for the sake of showing how dangerous it is to trust to mere sound :

"O rend for the seasons are rending,
And bend for the billows are bent,
Send songs for the torrents are sending
A song to thy spirit unshent."

Or :

"Go forth to the furrow and sow it
With seed in the spring-time of truth,
Spread the rich golden grain for the poet
To garner ere winter with ruth."

Sometimes Mr. Miller quite breaks down in the mere mechanism of his verses. He writes for instance :

"Has put forth in the frosts, and far regions
Of snows in the North, and South sands,
Where never the tramp of his legions
Was heard, or has reach'd forth his red hands."

Sometimes he makes use of words from which his modern master would turn with a shudder, and which imperiously demand the remedy prescribed for Marston by Jonson in the *Poetaster*: his worst sins in this respect are *resurrected* (p. 235) and *azaline* (p. 227). We feel that Mr. Miller's admiration for poets so exquisite in their use of metre and language as Swinburne and Rossetti are, ought to have taught him more precision, and that he has not enough native force or fire to make bad rhymes and lines endurable, as they may be perhaps in Blake, or to give currency to grammatical innovations. One whole section of this volume, "Fallen Leaves," is very correctly described by Mr. Miller in an introductory quatrain :

"Some fugitive lines that allure us no more,
Some fragments that fell to the sea out of time;
Unfinished and guiltless of thought as of rhyme,
Thrown now on the world like waifs on the shore."

Would it not have been better, we cannot avoid asking, to have followed Mr. Rossetti in that wise caution which made him refrain from throwing on the world anything but what he believed to be mature ?

It is no pleasure thus to criticize a poet who can write so vigorously as Mr. Miller does in his prelude to the "Isles of the Amazons," who is able to invent new measures of

his own, and who can produce such Spenserian stanzas as the following :

"They stand a line of lifted snowy isles
High held above a tossed and tumbled sea—
A sea of wood in wild unmeasured miles :
White pyramids of God where man is free ;
White monuments of God that yet shall be
The mounts of matchless and immortal song
I look far down the hollow days ; I see
The bearded prophets simple-souled and strong,
That strike the sounding harp and thrill the heeding throng."

The poem, "By the Sun-down Seas," from which this stanza is taken, is distinguished by full-breathed and resonant versification. In its matter it is a mixture of Californian descriptions, recollections of London, and Byron-worship, held together only, if at all, by the fervid feeling of the poet, and dedicated to the thought of death. "From Sea to Sea," the next poem in the book, has more of obvious unity. Here Mr. Miller describes a journey by the Pacific Railway from the Atlantic to the shores of San Francisco. There is perhaps too much of strain and effort after picturesque effect in the successive scenes which are presented to the reader, as "the matchless steed of the strong New World" bears him beneath the poet's guidance from west to east across a continent. But the conclusion is both highly imaginative and musical :

"We have lived an age in a half-moon wane !
We have seen a world ! We have chased the sun
From sea to sea ; but the task is done.
We here descend to the great white main—
To the King of Seas, with the temples bare
And a tropic breath on the brow and hair.

We are hushed with wonder, and all apart
We stand in silence till the heaving heart
Fills full of heaven, and then the knees
Go down in worship on the golden sands ;
With faces seaward, and with folded hands
We gaze on the beautiful Balboa seas."

The mixture of iambic and anapæstic rhythms which may be noticed in this quotation is characteristic of the whole poem. By far the longest piece in the book is called "The Isles of the Amazons." A story is told of a young knight who during the Spanish conquest of Southern America is supposed to have grown tired of bloodshed and battle and to have roamed away to the shores of the Amazon River. There he lived as a woman among warrior women who had abjured love, but whom he weaned to softer emotions by the melodies of his singing :

"They turned from the training, to heed in throng
To the old, old tale ; and they trained no more,
As he sang of love ; and some on the shore,
And full in the sound of the eloquent song,
With a womanly air and irresolute will
Went listlessly onward as gathering shells,
Then gazed in the waters, mirrored themselves,
Put back their hair and sighed, and were still.
And they said no word. Some tapped on the sand
With the sandalled foot, keeping time to the sound,
In a sort of dream ; some timed with the hand,
And one held eyes full of tears to the ground,
As the tide of years turned stormy and strong,
With its freightage of wrecks and impossible things,
And a flood of far memories, born of the song,
And borne to the heart on articulate wings."

The strange half-consciousness of womanly life awakened in the Amazons by the minstrel's music, and the gradual yielding of their queen to love, are described in a wonderful dream-melody of verse which suits Mr. Miller's style. But the thread of the romance is too thin to be spun out as he has spun it through more than a hundred pages, with preludes and introductions to each of its five parts. "In the

Indian Summer" has much of that rich and lustrous beauty which was so charming in the *Songs of the Sierras* ; but as a poem it is incomplete. Mr. Miller has not grown in the faculty of developing his theme with vigour and distinctness. A blinding tropical haze, through which we can scarcely distinguish figures or objects, seems to hang over his compositions of this sort. "Olive Leaves," another section of the book, appear to be reminiscences of a tour in Palestine. One or two of these pieces reveal the most amiable of Mr. Miller's characteristics—his sympathy with women in their tenderness and goodness, and his sense of the pathos of children : but the whole collection is even below Byron's *Hebrew Melodies* in adequacy to the subjects chosen for treatment. By far the most beautiful poem in this section is the prelude ; indeed it may be said in passing that Mr. Miller is singularly felicitous in the short introductions which he sets before his studied works of art. I quote the whole of this dedication for its simple beauty and touching truth of feeling :

"O boy at peace upon the Delaware !
O brother mine, that fell in battle front
Of life, so braver, nobler far than I,
The wanderer who vexed all gentleness,
Receive this song ; I have but this to give.
I may not rear the rich man's ghostly stone ;
But you, through all my follies loving still
And trusting me . . . nay, I shall not forget.
A failing hand in mine, and fading eyes
That looked in mine as from another land,
You said : some gentler things ; a song for Peace.
'Mid all your songs for men one song for God.'
And then the dark-browed mother, Death, bent down
Her face to yours, and you were born to Him."

Here, as in many other parts of this book, the personality of the poet emerges in a way to win our sympathy. Mr. Miller has the faculty of making himself felt through what he writes, and we quit his poems with a mingled sense of admiration and regret—admiration of his really great powers, regret that he seems unable to pursue one of two courses in their application, either to strike out a style for himself as original as his own theory of art (pp. 51-54) or else to acquire the principles developed by his masters, by Byron in the treatment of a subject, by Swinburne in versification.

J. A. SYMONDS.

W. Goethe. *Les Oeuvres expliquées par la Vie.* By A. Mézières.
Paris : Didier. 1873.

THE second part of M. Mézières' work begins with the period when the relations between Goethe and Schiller assumed, almost suddenly, the character of intimate friendship which they never afterwards lost ; and includes discussions of *Wilhelm Meister*, *The Elective Affinities*, *Faust*, and a few of the poems belonging to this later period. The volume has, perhaps, less freshness than its predecessor, for while M. Mézières' concern is avowedly only with Goethe's works as explained by his life, the works just enumerated are those which throw more light upon the story of his life than they derive from it. The author is evidently less at home in paraphrasing or commenting upon the *Bride of Corinth* and *Faust* than in reconstructing the features of Aennchen or Lili and in distinguishing the proportion of truth mixed with the idealized exaggerations of *Werther* ; and as it is when he ceases to derive much assistance from the poet's biographers that his criticism becomes most nearly commonplace and insignificant, it is impossible not to suspect that second-hand materials have been too much relied upon throughout ; the author, for instance, is better acquainted with M. St. René Taillandier's *Studies on the Correspondence between Goethe and Schiller than with*

the correspondence itself; and with M. Caro on the Philosophy of Goethe than with the scattered passages in his works which confirm or modify M. Caro's views. He has too much tact to be often wrong, but he seems scarcely aware how very obvious an opinion he is repeating when he observes that the general idea to be gathered from the *Elective Affinities*, *Wilhelm Meisters Wanderjahre*, and *Pandora* is "la nécessité de la privation." He is rather more original in estimating the effect exercised upon his writings by the state of moral isolation in which Goethe's conscientious adherence to this principle tended to place him before and after his friendship with Schiller. The dread of giving hostages to fortune, or contracting any material engagements, which might have the right or power of restraining the inner impulses of self-development or production, fixed the limit either of the duration or the expansiveness of most of Goethe's attachments. Schiller was the only one of his contemporaries with whom he could exchange ideas on something approaching to a footing of equality, without being called upon in any way to alter the normal course of his life, or to pledge himself to any sentiments that did not arise naturally out of a close interchange of mental good offices. The friendship which had so excellent an effect in stimulating the productive energies of both poets was originally and chiefly a friendship between the poets rather than between the men. M. Mézières doubts whether, except in the prison scene in *Faust*, Goethe ever displays the highest dramatic power, and it is intelligible why he should always fail to do so in cases where the hero is the mouthpiece of his own anxiety not to allow another life to become too closely and influentially bound up with his own, for it is by the conflicting action of such intimate moral ties that most tragic effects are produced. He dwells at some length upon the contrast between Schiller's aspirations after realizing the Ideal and Goethe's bent towards idealizing the Real, and he sees in the fortunes of the Weimar theatre, as well as in Wilhelm's experiences as an actor, proof of the insufficiency of merely æsthetic standards to direct or satisfy a miscellaneous public. He is careful not to exaggerate what seemed the anti-popular, unpatriotic aspects of Goethe's political attitude, and traces it to his consistent conviction that it was impossible to act with effect upon masses, that individuals alone are perfectible, and that as each individual has to work out his own perfection, the greatest man has no higher duty to his neighbour than to lead his own life as perfectly as possible, giving thereby an example to his contemporaries, and in the case of an artist, also works of permanent advantage for the æsthetic education of the race. Of the *Bekenntnisse einer schönen Seele* he remarks that Goethe's sympathies were excited by the doctrine which gave his heroine the same mental calm and the same strength for renunciation as were the objects of his own endeavour, while his admiration was scarcely on the whole diminished by the circumstance that he believed her own faith and imagination to be the only supernatural powers from which she derived aid and inspiration; her own opposite conviction being a mere illusion and the one point on which her wisdom was less realistic than his. Perhaps the printer is answerable for the fact that Fräulein v. Klettenberg's name is seldom spelt twice alike. M. Mézières criticises with some justice the reception which Madame de Stael met with from the two great lights of the Weimar Court. It is easy to believe that her voluble conversation gave promise of all the misconceptions perpetuated in her book, but even where she was least able to understand, a generous desire to do justice *à tort et à travers* is so obvious that one cannot but wish her foibles had been tolerated with good-

humoured superiority instead of exciting as much consternation as an invasion in force by the French army. It would have been impossible to find a point of vantage for Madame de Stael over either Napoleon or Goethe, if both had not failed in courage when the time came to encounter what was not after all a very formidable wit. Schiller spoke French with difficulty, but Goethe had no reason to shun the encounter, for he convinced the visitor that he had an "esprit prodigieux en conversation . . . s'il était Français, on le ferait parler du matin au soir." No doubt the prospect was not seductive, but if he had turned his very just and acute criticism of Madame de Stael's conversation "comme femme et comme Française" into an epigram, he would probably have found her able to appreciate it. The epigrammatic form is all that M. Mézières thinks wanting to excuse the introduction of the many valuable sayings copied from his note-books to swell the bulk of the last part of *Wilhelm Meister*. The commentary on *Faust* is the weakest point in the work, and ends with the not very intelligent complaint that Faust feels and expresses no remorse either for the sins of his age or youth. It is at least as obvious that the theory of sin has no place in Goethe's philosophy as that the theory of renunciation has a conspicuous one. On the whole M. Mézières' book is more likely to be serviceable to his countrymen as an introduction to, than as a substitute for the study of the poet's own works.

EDITH SIMCOX.

LITERARY NOTES.

In the *Revue des deux Mondes* (Aug. 1) M. Rambaud has an article on the legend of Peter the Great in the popular songs and tales of Russia, which is full enough to be interesting, though very far from exhaustive; he touches on the question what guides the popular muse in celebrating and the popular memory in retaining one characteristic incident or trait rather than another, but he does not attempt to fix the comparative age of the different songs preserved by tradition, the only way in which the history of the legend could be made to throw fresh light upon the growth of the *chansons de geste* of Charlemagne, with which he compares it. One of the best of the songs tells how the Tsar wrestled with a dragon, who craved as a reward for not abusing his victory "to be allowed to drink brandy without payment in all the taverns of the crown," a conclusion which the memory of Goethe's *Sänger* warns us not lightly to condemn as prosaic. In the same number some *Stances Satiriques* by Henri Blaze de Bury are noticeable not so much for novelty of conception (for the immorality of well-born women is an old theme with satirists), as for the fluent energy and *entrain* of the verse, especially on the last page.

Mr. Herbert Spencer's paper in the current number of the *Contemporary* is mostly occupied with a restatement of the dangers that may be expected to follow from sentimental or humanitarian interference with the principle of natural selection, while an article by Mr. George Darwin in the same review seems to advocate legislation *in aid* of that principle. The same line having recently been taken by Mr. Greg and Mr. Galton, it is perhaps time to ask whether the doctrine of evolution does not offer a way of escape from the supposed necessity of "that natural process of elimination by which society continuously purifies itself." To kill off the weaker members of a community does not add positively to the strength of the survivors, while it might be maintained that, as all powers grow by exercise, the strong who undertake the protection of the weak will become in the progress of evolution, stronger than if they had no weak to protect; while on the other hand, the naturally weak may, if the conditions of life can be made sufficiently favourable to them, develop powers that after a few generations will seem to have been worth transmitting. At any rate the survivors in the natural struggle for existence will not become increasingly "fit" for the task of improving the specific type by learning to rely

upon a quasi-mechanical process—only perfectly natural while it is unconscious—which can but testify, at the best, to their comparative, and not to their positive approximation to specific excellence.

The *Fortnightly* has an interesting article on Poliziano by Mr. J. A. Symonds; the translations from his Italian poems are so good that those who are so inclined may conclude from them, without injustice to the originals, that the reviewer's estimate of his author errs, if at all, on the side of partiality.

Unsere Zeit for July and Aug. 1 has a very interesting and *gründlich* account of the discovery, importation, and cultivation of the chinchona tree. The "Marginal notes on Goethe's Works" by different writers given from time to time in *Im Neuen Reich* are worth the attention of zealous students of his works, or the still more voluminous mass of miscellaneous Goethe literature.

We have received *The Last Knight* (Hurd and Houghton), translated by T. O. Sargent from the German of Anastasius Grün (Count Auersperg). It is a quasi epic in a cycle of ballads, fluent, spirited, and if generally obvious, seldom false or vulgar, on the adventurous career of Maximilian of Austria. The translation is worthy of the original.

A new work of Victor Hugo's is promised for the spring: the subject is taken from the history of the Revolution, and the title, according to the *Athenaeum*, will be *Quatre vingt treize. Premier récit; la guerre civile.*

We have reason to believe that Mr. Thorold Rogers is the author of the lively and spirited imitations of Horace now appearing in *Temple Bar* under the signature of Edwin Heron.

A letter from Dr. Schliemann in the *Allgemeine Zeitung* (Aug. 5) describes the discovery in the course of his excavations of a treasure which, whether that of Priam, as he of course hastens to conclude, or not, appears to be of great value and interest; he mentions shields and vessels of different sizes made of wrought, unalloyed copper, silver vases, a flask and cups of pure gold, ornamented gold fillets and pendants, bracelets, and a large number of gold earrings, buttons, and other trifles. The silver and copper vessels are in some cases joined together as if welded by fusion—when Troy was burnt.

Art and Archaeology.

Sacchi's Pictorial Notices of Cremona. [*Notizie Pittoriche Cremonesi*, raccolte da Federico Sacchi.] 8vo. Cremona. 1872.

THIS work is alphabetical, and divided into four parts, of which the two first are by Mr. Sacchi, while the two last are extracts from the accounts of the Cremona cathedral printed from an old MS., and documents from the Cremonese archives put together by Mr. Ippolito Cereda. In the course of their labours the compilers publish at length much that has been published before, as an instance of which the notes on Girolamo da Cremona may be cited, which are extracted to the extent of fifteen pages from the last edition of Vasari. What they add to our stock of knowledge is perhaps less than we should expect from a large octavo of 360 sides.

The first concrete fact at which we arrive in the space of thirty opening pages is that Sofonisba Anguissola died in 1626, and not, as historians usually assume, in 1620. Much patience and research are displayed by Mr. Sacchi in establishing this fact; yet we may ask whether the result was worth the cost in time, in labour, and in print. Further on, we find our knowledge increased by small and not uninteresting contributions to the history of the lives of the Bembos, Boccaccinos, and Campis; and an entire chapter giving intelligence of Marco Marziale, who, though not a Cremonese,

painted much for Cremonese churches. The only fault we have to find with this portion of Mr. Sacchi's book is its want of condensation. Descriptions of pictures, lives, and annotations succeed each other without producing that clearness in the reader's mind which they ought to create; and the confusion is not removed by the casual introduction of appendices containing matter previously unnoticed, and thrust in at last because it was discovered too late to be introduced before.

Amongst the documents of Mr. Cereda which are curiously described in a title-page as hitherto "unedited" we find the contract of Pordenone for the frescoes of the Cremona cathedral, printed as long since as 1823 by Count Maniago; others relative to Bembo and the wall paintings of the *castello* of Pavia, which appear at full length in Rosmini's History of Milan published in 1820. But besides these we have, it may be owned, new documents of interest, such as Boccaccino's will proving this artist's existence to have extended beyond the year 1524, contracts illustrating the life of Camillo Boccaccino, contracts proving that Soiaro was born at Cremona, and statutes showing the organization of the painters' guild at Cremona in 1470.

To the Cremonese this book will probably be welcome, as it gives them an account in their own language of many pictures which have been removed by speculators from their churches and public edifices. It will be further welcome as extending their acquaintance with men of whom Cremona may still be proud. As a book of reference also these *Notices* will have their use. But they do not and never will fill the place of a standard work. J. A. CROWE.

LA COMMISSION DE LA TOPOGRAPHIE DES GAULES.

WHEN the *Academy* noticed the death of the ex-Emperor Napoleon III. "as an author," no mention was made of scientific institutions which have their origin in the archaeological fancies of the historian of Julius Cæsar, viz. the Commission for the Topography of Gaul and the Celtic Museum at St. Germain-en-Laye. Both have fortunately survived the Empire, and they deserve to be made known to British scholars. Let us here say a few words of the former.

The "Commission de la Topographie des Gaules" was established in July, 1858, for the study of national geography, history, and archaeology up to Charlemagne's times. It was composed as follows: MM. de Saulcy (président), Amédée Thierry, Guignault, de Wailly, Alfred Maury, Colonel Blondel, Lieutenant-Colonel de Cournat, Chéruel, Alex. Bertrand, Alf. Jacobs. In later years MM. Viollet-Leduc, General Creuly, Léon Renier, Anatole de Barthélemy and Lartet, all historians or antiquarians of note, were added to the original members of the Commission.

It is to this Commission that we are indebted for the prosecution of the excavations at Alise-Sainte-Reine, the light thrown upon the vexed Alesia question, and the important discoveries made at that place, not to mention many other researches and excavations which have already been made or are still in progress throughout France. But one result generally follows when sovereigns aspire to take an active part in scientific undertakings: and people anxious to cover personal ambition under the show of zeal for archaeology turned into would-be antiquarians to attract the favourable attention of an antiquarian Emperor.

Beside those recorded in history, there are many places in France to which, rightly or wrongly, the name of Cæsar remains attached—Cæsar's Camp, Cæsar's Ditch, &c. The antiquarians were equal to the occasion and poured forth essays and controversial papers with great fertility, to determine the traces of Julius Cæsar. Local rivalry was soon imported into the matter. Cities or villages (what a patriotism for the descendants of the old Gauls!) contended for the honour of having been burned down by the Cæsar of old. The modern Cæsar, who was not without a certain kindness

in these matters—and who did not like contradiction—was soon won and finally led by those who invariably found he was in the right.

The "Commission de la Topographie des Gaules" had their own opinion on some archaeological points. They would not place Genabum at Gien, Uxellodunum at Puy-d'Issolud, &c. The Emperor, by little and little, set them aside, and in the last years of his reign he altogether ceased to consult them: some members of the Commission silently retired. The Commission nevertheless continued their work, and still gave a vigorous impulse to Celtic and Gallo-Roman studies. All the antiquarian societies of the provinces and the chief French scholars now correspond with them: important excavations are being made at many points under their direction, and the museum at St. Germain owes to them a large portion of its rich collections.

The excavations at Alise, those at Mont-Beuvray, the controversy about Gaulish wall-building, the determination of the ancient highways are their principal achievements. One may confidently say that with modest resources the Commission have greatly extended the conquests of Gaulish archaeology, and that it is now one of the most important centres of research in the wide field of Celtic antiquities.

Up to the present time the Commission have published:

1. An oro-hydrographical map of Gaul in four sheets. This is a splendid *carte muette*, which has been recommended by the Ministry of War for military schools and for strategic studies, and from which reductions are now being made for public schools by order of the Ministry of Public Instruction.
2. A map of Cæsar's campaigns, now out of print.
3. A map of Gaul under the proconsulate of Julius Cæsar in four sheets, identical with the oro-hydrographical map already mentioned, with the addition of the nomenclature and colours for boundaries, &c.
4. Three parts of a *Dictionnaire Archéologique de la Gaule, époque celtique*, viz. forty-two 4to sheets and forty engraved folio plates.

The text goes as far as the letter D. It contains under their ancient form the names of places mentioned by the ancients, and gives the text of references epigraphical as well as historical; most of them have been identified with modern places, and the Commission give their arguments for each name. It gives next, but under their present form, the names of places where megalithic monuments (circles of stones, standing-stones, &c.) are still on view, and the names of those where antiquities of any kind (stone or metal implements, arms, coins, &c.) have been discovered. It is in fact a *résumé* of the archaeological history of each locality. Some of the articles are extensive and interesting monographs; e.g. those on Abbeville and Saint-Acheul, places well known by the implements found in their alluvial beds, and that on Alise-Sainte-Reine, which, in our opinion, is satisfactorily proved to be the celebrated Alesia of old. In the first part, the Commission had ventured to give etymologies of names of places which were in more than one instance objectionable: in the second part, they have left etymologizing aside and have wisely confined themselves to archaeological ground. Their business is to produce *facts* which others may work into history or philology, not *opinions*; and etymologies are opinions, however certain they may appear.

The plates of these parts are beautifully got up; they represent stone implements found at St. Acheul, Abbeville, and the Périgord caverns, views of the Gavr Inis tumulus, and of its strangely-decorated walls, the Gaulish coins, *facsimiles* of the Gaulish inscriptions found in France, Gaulish arms and ornaments, &c. It is indeed nothing less than an illustrated encyclopædia of Gaulish life.

5. A map of Gaul indicating the site of dolmens and megalithic monuments.

6. A map of Gaul indicating caverns which have been inhabited in prehistoric times.

7. A preliminary map of Gaul in the fifth century A.C., issued for private circulation, to be communicated to local scholars and antiquarians who correspond with the Commission, and to call forth their observations on the highways, &c.

8. Four sheets of instructions (with plates) for the assistance of correspondents of the Commission in classifying arms, coins, and jewels, and in interpreting ancient itineraries.

Moreover the Commission are preparing a map of Gaul showing the geographical distribution of the Gaulish tribes; and when they have finished the Dictionary of Celtic Archaeology, which is destined to be a complete repertory of the antiquities of Independent Gaul, they will begin a Dictionary of Gallo-Roman Archaeology on the same plan, to comprise the long period extending from the reign of Augustus to the Frankish kings.*

H. GAIDOZ.

NOTES ON ART.

The new Belgian journal *La Fédération Artistique* offers temptation to subscribers in the shape of prizes consisting of large photographs, worth five francs each, taken from the works of modern Belgian artists. Two subscriptions give a right to one of these prizes (*primes extraordinaires*), and subscribers are allowed to choose from a series of twenty-five photographs. Besides these *primes extraordinaires*, three gratuitous prizes representing the amount of the subscription in their value will be given annually to all subscribers.

The present list of prizes comprises: Plage de Scheveninghe and L'enfant malade, by Bource; Partie de Campagne and L'enfant trouvé, by Boks; Indiscrétion and D'Anvers à Tamise, by Cap; Carnaval, by Franck; Trop précoce, by Heyermans; Hiver and Vue prise à Zwynndrecht, by Lamorinière; Céramique, by Lagye; Taverne hollandaise au XVII^e siècle, by Moermans; La vendeuse de statuettes, by Ooms; Pêcheurs à la ligne, by Quetton; Famille italienne, by Swerts; Les cadeaux de nocces, by Van der Ouderaa; Intérieur d'écurie, by Van Kuyck; La petite tricoteuse and Un froid de chien, by Verlat; Promenade, La Place de Meir au XVIII^e siècle, and Par droit de conquête, by Vinck; Partie d'échecs, by Webb; Clair de lune and Cascade, by Wust.

In the first instance two photographs from Alma Tadema, "L'amateur de tableaux" and "L'amateur de sculptures," were included in this list, but the choice of subscribers falling chiefly on these the copies have been exhausted and the two pictures by Charles Verlat substituted for them.

The Royal Academy of Belgium has recently bestowed its quinquennial prize for literature on M. Édouard Fétis in consideration of his writings on the Fine Arts. M. Fétis is chiefly known by his contributions to *L'Indépendance belge*, but his learned work on *Les Artistes Belges à l'Etranger*, reprinted in 1857 from the *Bulletins de l'Académie Royale de Belgique*, introduced him to most students of art. His latest work, *L'Art dans la Société et dans l'Etat*, which appeared in 1870, has met with less attention in England than ought to have been accorded to it. Belgian writers are indeed too often overlooked by our critics.

The *Gazette des Beaux-Arts* for August contains: 1. An article by M. Sully Prudhomme on "Quelques œuvres décoratives inédites." These modern decorative works adorn the house of M. Paul Sédille, a French architect, and are chiefly symbolical representations in sculpture and painting of various abstractions, such as Nature, Poetry, Music, Architecture, &c. M. Prudhomme is so enchanted with the dignity and beauty of these representations that he cannot restrain himself to prose in describing them, but breaks out into enthusiastic verse. Speaking of two caryatides of Nature and Tradition executed by M. Chapu which are to be seen in the vestibule of the mansion, he tells us "en cherchant à les décrire je sens l'harmonie de leurs lignes rythmer sournoisement ma phrase, et comme, au demeurant, la poésie ne saurait être pire en vers qu'en prose, je m'abandonne sincèrement au lyrisme et je rime un sonnet en leur honneur." Fancy an English or German critic allowing the harmony of a work of art "rythmer sournoisement sa phrase" or abandoning himself sincerely to lyrism! The quality of M. Prudhomme's verses, we feel obliged to state, offers no excuse for this abandonment.—2. The pictures of the German schools of painting in the Belvedere Gallery at Vienna are criticised by M. Clément de Ris in a notice

* The publications of the Commission which are not out of print, or intended for private circulation, may be had at the "Librairie Militaire de Dumaine" in Paris.

continued from a previous number. M. de Ris considers that the works at Vienna by Albrecht Dürer are far superior to those at Munich, an opinion in which we cannot agree, remembering that Dürer's grand paintings of the Apostles, universally acknowledged to be the masterworks of his art, are in the Munich Gallery.—In article 3, M. Dumont gives us a learned disquisition on the "Vases peints de la Grèce propre" as distinguished from those found in Italy of Greek origin which are far better known. The article is to be continued, and is illustrated by several interesting outline drawings of classic subjects.—4 is devoted to an *In Memoriam* review of the late Louis Vitet, one of the best art writers and critics of France.—5 is entitled "Causerie sur le Château de Blois" and is by M. Lechevallier-Chevignard. The Causerie is enlivened and rendered more instructive by several woodcut illustrations and by an effective etching by Rochebrune of a picturesque corner of the old château.—6 considers "La Gravure au Salon," which we may suppose concludes the notices of the Salon of 1873. The writer, M. Paul Leroi, suggests to M. Emile Galichon, who is at the head of the Société Française de Gravure, a French Exhibition in Black and White such as has already been held in London and New York. It is strange certainly that France, whose engravers and aquafortists are certainly not inferior to those of any nation, should be behindhand in such an exhibition.—7. M. H. Havard continues his "Exposition rétrospective d'Amsterdam."—8. A notice by M. Olivier Merson of the Exposition at Bordeaux.—9. M. Louis Decamps reviews *Le Frans Hals de MM. C. Vosmaer et W. Unger*, a work to which we have already drawn the attention of the readers of this journal. One of Unger's powerful and characteristic etchings from Hals' picture of "The Banquet of the Officers of the Arquebusiers of St. George in 1827" accompanies the text. The *Gazette* is worth buying this month for this etching alone.—10. A review by M. Louis Desprez of *Les Collectionneurs de l'Ancienne France, Notes d'un Amateur, par Edmond Bonnaiffé*.

Dr. Alfred Woltmann in his "Streifzüge in Elsass," continued in the present number of the *Zeitschrift für bildende Kunst*, gives an interesting history of Colmar, its museum and its great fifteenth century master Martin Schongauer, who was the predecessor and in some respects the teacher of Albrecht Dürer. Unfortunately for students Martin Schongauer's paintings are seldom to be met with except in his native town of Colmar, so that it is difficult for those who have not, like Dr. Woltmann, made excursions into Elsass to judge of them, but his beautiful engravings and etchings are less difficult of access, and reveal the mind of the artist more fully perhaps than his larger works in painting. There is a splendid collection of his prints in the British Museum. The *Zeitschrift* gives us two woodcuts from photographs of the wings of an altar-piece in Colmar by Schongauer and a worn-out woodcut from Schnaase's *Geschichte* of the "Madonna im Rosenhaag," Schongauer's most celebrated picture.

The New South-East Court of the South Kensington Museum has now for some time been open to the public, and a short account of the objects it contains has been added to the general guide-book. A detailed descriptive catalogue of the architectural and monumental sculpture has also been prepared by Mr. J. H. Pollen, and is now "under revision." Truly the administration of the South Kensington Museum deserves more gratitude than it is likely to get for its labours in carrying out such works as this. "Il est impossible," as is even owned by a French critic, "de mieux comprendre et de mieux remplir les devoirs d'un musée vis-à-vis du public."

The *Portfolio* for August contains an interesting article by Mr. Simcox on "The Greek face before Phidias," in which it is argued that the remains of archaic Greek art indicate "a transformation of the Greek face corresponding to the transformation which we know took place in the Greek mind."

A good, but not very interesting etching by Legros, a lithograph from Andrea del Sarto's well-known portrait of himself, and two small and charming etchings by the editor, Mr. Hamerton, are the illustrations of the month.

New Publications.

- ALBERT, P. *La Littérature française au xvi^e siècle.* Paris: Hachette.
- BERGMANN, E. v. *Beiträge zur muhammedanischen Münzkunde.* In Comm. Wien: Gerold's Sohn.
- CONZE, A. *Zur Geschichte der Anfänge griechischer Kunst.* In Comm. Wien: Gerold's Sohn.
- CURTI, P. A. *Pompei e le sue rovine.* Vol. I, II. Milano: Sanvito.
- FURNESS, H. H. *A New Variorum Edition of Shakespeare.* Vol. II. Macbeth. Philadelphia: Lippincott & Co.
- GARUCCI, R. *Storia dell'arte cristiana nei primi otto secoli della chiesa, corredata della collezione di tutti i monumenti di pittura e scultura incisi in rame su cinquecento tavole ed illustrati.* Fasc. 14-17. Prato: Giachetti.
- LEGER, L. *Le Monde slave.* Paris: Didier.
- ODRY, L. *De l'histoire et de l'authenticité de la fresque de Raphaël; le Père éternel bénissant le monde, provenant de la Magliana.* Paris: Imp. Goupy.
- RAYMOND, P. *Cartulaire de l'abbaye de Saint-Jean-de-Sorde, publié pour la première fois sur le manuscrit original.* Paris: Dumoulin.
- RUSKIN, John. *Modern Painters.* New ed. (Reprint.) Smith and Elder.
- STONE, J. B. *History of Lichfield Cathedral.* Longmans.
- WEIGELT, G. *Die nordfriesischen Inseln vormals und jetzt. Eine Skizze des Landes und seiner Bewohner. (Zweite umgearbeitete Auflage.)* Hamburg: Meissner.

Philosophy and Science.

- A *Budget of Paradoxes.* By Augustus de Morgan. [Reprinted, with the author's additions, from the *Athenæum*.] London: Longmans. 1872.

It is an opinion current among librarians, that there is no such thing as trash: that the most foolish unconnected flysheet treating of nothing at all should in all cases be preserved and bound up with other such flysheets, not in view of any possible future investigator to whom it may be as gold among quartz, but because it is right that this thing should be done. No doubt a very great good comes of this absolute universalism in the conscience of all kinds of collectors. But still, for the purposes of the outer world, it remains true that there are books and books. It is obvious of some kinds of literary or scientific work that if A. B. had not done it, C. D. would have taken his place; and that at no loss to the world, even though C. D. were a person of mean capacities. The bricklayer who was to lay a certain course of bricks may fall off a ladder and yet the house be no worse in the end; while the skilled mason who carves a gargoyle may leave something which represents not merely his day's wages but himself (invaluable) so long as stone shall last, and therein something which no other man could exactly produce. The book before us is essentially a gargoyle. It is by very far the most individual book of the age—individual, not merely in its own singularity as a book, but as presenting with a marked degree of clearness and exactness the personality of one who was never quite a man among men, but always a man among other men.

The paradoxes herein treated of are those set forth by people ignorant of mathematic, who think themselves qualified to show such as are not ignorant where they have gone astray. It might well have been conceived that a large book on such a subject would have been the dullest of the dull: that it would appeal only to mathematical readers; and even to them only for so long a time as the follies exposed in it were of recent interest. No anticipation could be more thoroughly wrong. The fault of the book is in the direction of a too incessant playfulness; it is excellent grotesque, which is only to be borne because it is so clearly an outwork of the beautiful. For while the pretenders here slaughtered are for the most part indeed nobodies, whose only use is for an example and a warning; while the jokes (with some

notable exceptions) are small jokes, and such as we like chiefly in our idiotic moods; while even the character which so clearly shows through these pages, great and lovable as it is, is yet rather singular than pre-eminent, a study for comparative psychology rather than an ideal for the world to come; while all this is true, the book is an endeavour and a stretching forth towards right thinking and a protest against wrong thinking, which is of infinite solemnity and weight to us of this present time. For we have no right to conclude that these paradoxers upon whom the *Budget* has fallen have been sinners above all that prate; we ought rather to learn that except we mend our ways we shall all likewise perish.

The word *paradox* is unfortunate; it includes under one name a rare thing and a common thing, and it brings upon the rare thing which is good some of the discredit that belongs to the common thing which is bad. "A paradox is something which is apart from general opinion, either in subject-matter, method, or conclusion." The "general opinion" must be that of people who have an opinion; not of all people indiscriminately, including those who have never considered the subject. The common form of paradox consists in ignorance of the subject-matter, powerlessness in the method, or incapacity to understand the conclusion. The rare form of paradox is an addition to the reasonable part of general opinion, which happens to contradict some of the unreasonable part. The older use of the word was strictly impartial, and it might be applied without any want of respect; De Morgan says the change came in the seventeenth century. It is certain that at present the epithet is a disparaging one; the overplus of wrong thoughts included under it has slowly sapped the moral constitution of the word, and it now sometimes stands in the way of a right appreciation of the nobler form of paradox.

For as it is hardly possible to lay too great a stress on the weight and worthiness of thought which diverges from the general opinion on account of its greater strength, which by its continual work in the world has in fact built up the present mind of man; so it is before all things necessary here to distinguish carefully from it that other divergence which comes of weakness and goes to destruction. It is true in all departments of human action that reform is the most precious and sacred prerogative of a citizen; but in order to have that prerogative one must be a citizen, not an alien; and one must act like a citizen in a legitimate and constitutional way. A man who should find an error in the value of π —even in the six hundredth place—would have all honour paid him as a true reformer by the brotherhood; but to this two things are necessary: he must not be ignorant of trigonometry, and he must work out the calculation. The belief of the weak paradoxer, on the contrary, is that things can be done by a flash; that a discovery is to start from his ignorant and untrained mind like Pallas from the brain of Zeus. We know, of course, that the great discoveries—the true and noble paradoxes—have always come from men who by long prenticeship had so far mastered the tools forged by their fathers that they were not tied down to one particular way of using them; we know that Jove's head cannot crack with Minerva unless he have previously swallowed Metis. The time taken by distant discoveries—gravitation, for instance—is foreshortened by perspective; but we have good cases immediately before our eyes. In Maxwell's theory of electricity we have as instructive an example of the paradox of right thinking as might well be; a conclusive victory over rival doctrines won by twenty years' patient proving (and improving) of the weapons wherewith previous battles had been gained; a testimony to all time that genius is a capacity for taking an infinite amount

of the right sort of trouble. But your paradoxer of the *Budget* will master by a *coup d'état* the republic of science, which allows no masters, but proved comrades only; he will climb by the back stairs into the house of knowledge, that has no back stairs. If there be any reward in the penal incurable blindness that follows such sacrilege, verily he has his reward.

And here is another important difference between the two kinds of heretics. The strong heretic is so because his ideas are living and plastic, and have an internal motion whereby they adapt themselves continually to new work; so that no man is so perfectly open to conviction as he is. But the weak heretic is so from the very narrowness of his range, which cannot grasp even established demonstration; he is hermetically sealed against all possible argumentative germs that might bring into his mind the lower forms of life.

In drawing this sharp distinction between two habits of mind, however, we must not forget what the *Budget* is specially calculated to impress upon us in a terrible and alarming manner; the exceedingly gradual transition from one to the other, and the possible co-existence of both in the same person in regard to different subjects. De Morgan has some very good remarks on the value of a study of logic in helping us to extend the habits of right thinking which we have got by practice in one subject over the whole range of our knowledge. A good specialist who is also a good logician can hardly be betrayed into gross paradox out of his proper range; for his special knowledge will make him cautious about facts, and his logic about conclusions. No man could have greater advantages in this respect than the author of the *Budget*, who had himself made important additions to logic, and was an excellent mathematician. And yet—this is the solemn warning of the book—he has in one case fallen into a sin to which we are all tempted, whether by the unpromising precepts of theological systems, or by the insidious seductions of scientific text-books; the sin of making assumptions and then hiding from ourselves that they are assumptions and that we have no right to believe in them. Apropos of "From Matter to Spirit," he says that he refers certain phenomena "*either to unseen intelligence or something which man has never had any conception of.*" This apparently suspended judgment involves and hides the assumption that the said phenomena cannot possibly be referred to certain well-known and commonly conceived things—the art of the conjuror, and the delusion of contagious excitement. This enormous assumption is—of course unconsciously—introduced and hidden under a brilliant display of candid impartiality and cautious scepticism. We point to this, not as throwing a stone thereat; but desiring that it should indicate the great and serious importance of the *Budget of Paradoxes*. To sum up, this is a book that should be read by those who care about circle-squarers and all manner of jokes, mathematical and other; by those who care to make the acquaintance of Augustus de Morgan, which it is well worth while to do; but above all by those who care to be led into right thinking and warned from wrong.

W. K. CLIFFORD.

The Fertilization of Flowers by Insects and their Mutual Adaptation for that Function. [*Die Befruchtung der Blumen durch Insekten und die gegenseitigen Anpassungen Beider. Ein Beitrag zur Erkenntniss des ursächlichen Zusammenhanges in der organischen Natur.* Von Dr. Hermann Müller.] Leipzig: Engelmann.

THE old idea, once a favourite topic with poets and divines, that the beauty of the external world was intended exclusively to promote the enjoyment of mankind, has suffered many severe shocks from the rude onslaughts of modern science. The discovery that the earth was a habitable and

inhabited world countless ages before man appeared upon the scene might be explained on the hypothesis that it was thus becoming prepared for the advent of the masterpiece of creation; the egotism of the human species might even survive the discouraging fact that gems of purest ray serene were born in the unfathomed caves of Silurian or Devonian oceans, and that flowers of the most perfect beauty were born to blush unseen in the midst of oolite or cretaceous deserts. The un pitying theory of the survival of the fittest however points relentlessly to the conclusion that man after all is not the *raison d'être* of anything he sees around him except himself; that "jedes für sich" is the rule of Nature, that every organic being is contrived so as to have the best chance of supplying its own wants, and not for the sake of administering to the wants of others; in fact that the philosophy of science must, for the future, be an application to the realms of Nature of the principle of self-love, such as even a Hobbes might accept.

The volume before us, though full of minute details of empirical observation, is an important contribution to this philosophy of science. The main fact which forms the ground-work of Prof. Müller's observations is not new. Towards the close of the last century one of the keen observers of nature with which that period abounded, C. C. Sprengel, in his *Das entdeckte Geheimniss der Natur im Bau und in der Befruchtung der Blumen*, pointed out that a number of the different forms which the flowers of plants assume are obviously contrived for the purpose of attracting insects and of enabling them to carry away the pollen which is required to fertilize other flowers of the same species. This line of research, which had been almost lost sight of since Sprengel's time, has been renewed in our own day by Darwin in this country, the writer of this volume and Hildebrand in Germany, Axell in Sweden, and Delpino in Italy; the first-named naturalist reducing the sum of his observations to the well-known aphorism that "nature abhors perpetual self-fertilization." The whole of that complicated structure which we call in ordinary language the "flower" of a plant consists, in fact, of the reproductive organs enclosed in a number of envelopes which have for their purpose not only the protection of the essential organs within them, but the attraction of those insects or other animals which are necessary for the fertilization of the ovules.

The contrivances for effecting this purpose, though infinite in number and variety, may be classed under two principal heads, colour and scent. A large number of insects obtain their food chiefly or entirely from the juices of flowers; and the necessity for cross-fertilization renders the visits of these insects as indispensable to the life of the flower as to that of the insect. To enable them to find this food the juices are very commonly scented; a field of clover or beans will attract all the bees in the neighbourhood from a great distance; and if carefully watched the bees will be found not only to carry off with them the honey, but to transfer also a portion of the pollen from flower to flower. Where the juice of the flower does not happen to be scented, the bright colour of the corolla commonly serves the purpose of attracting insects from a distance. Different insects and other small animals have apparently very different ideas of beauty as regards the form and colour of the flower. Humming-birds are said by Delpino to have a penchant for scarlet and for flowers with long wide tubes; hence in countries where there are no humming-birds, as our own, scarlet flowers or those with long wide tubes are very rare among native plants.* The largest-flowered of European plants,

the peony and several species of convolvulus, are visited chiefly by large beetles allied to the cockchafer; and as we proceed further north to climates too cold for this description of insect, the corresponding flowers also disappear, not being able to mature their seeds without assistance. When fertilization is effected by very small insects, something more than a large conspicuous corolla is required to show the visitors the way to the nectary or receptacle for the honey; hence arises the variegation of flowers, the bands or patterns of colour being almost invariably so arranged as to direct the insect in the way it should go in search of food. As nature seldom provides two contrivances concurrently for the same purpose, we find that variegated (wild) flowers are seldom scented; while the most odoriferous flowers are almost always uniform in colour; the evening-primrose, which opens its scented flowers only in the dusk, requires no variegation to direct the night-flying moths to the scented nectar.

Illustrations of all these laws have been observed by the naturalists we have mentioned, and have been collected with great industry in this volume by Dr. Müller, himself no idle worker in the same field. According to the theory of natural selection those descendants from a common ancestor which vary from the others in any direction that tends to increase their attractiveness to insects or to secure a more certain transference of the fertilizing pollen from one flower to another, will have the best chance of survival and of perpetuating and increasing this peculiarity in their progeny. Dr. Müller has himself examined, or records the observations of others on, nearly four hundred species of plants, and describes the structure of the reproductive organs and of their envelopes, with especial reference to their adaptation for self-fertilization or for cross-fertilization, giving in each case a list of all the insects which have been observed to visit the flower, and illustrating his description, where necessary, by admirable woodcuts. This portion of the subject is more or less familiar to most botanists; what Dr. Müller has made peculiarly his own study is the tracing out of the same principle, applied to the visiting insects, as previous observers have noted with respect to the visited flower. By the same principle of natural selection those insects which display to the greatest perfection contrivances for extracting the honey of flowers or for carrying away the pollen—the latter serving in some cases for their own food, in others for storing up in their nests as food for the larvæ or young—will stand the best chance of perpetuating offspring provided with the same peculiarities; and we find here abundant descriptions and drawings of the various forms which these contrivances assume in different classes of insects.

In his concluding chapter Dr. Müller discusses the origin of these phenomena, and declares himself a firm adherent of Darwin's theory, finding the explanation of every special contrivance on the one side or the other in the principle to which we have already referred. He therefore vigorously combats the teleological views of Sprengel and Delpino, the latter of whom especially, while accepting the theory of evolution or descent with modification, yet disputes the soundness, or at least the adequacy, of the other theory usually associated with it, that of natural selection. He recurs, in fact, to the pre-Darwinian doctrine of design to account for the phenomena which furnish the subject of this work, or, as Müller represents him: "Nature is with him a being endowed with human thought, which has invented definite forms of flowers leading necessarily to cross-fertilization; and this is then completely carried out by the employment of different parts of plants for the same purpose. This creator of flowers, far exceeding in talent the cleverest man, has pre-

* Among our common wild flowers it would be difficult to name any of a true scarlet hue except the poppy and the little pimpernel.

destined certain forms of flowers for certain insects, and certain insects for certain forms of flowers, and has contrived each one to fit the other." The reasons which may be adduced against this theory would be simply a repetition of the main argument of Darwin's *Origin of Species* and *Variation of Animals and Plants under Domestication*. The believer in the doctrine of natural selection finds it more consonant with the facts which he sees around him to assume that Nature—if it is possible to personify the idea—works, not by preconceived notions and prearranged harmonies, in which case we should expect to find everything perfect, without discord, waste, or incompleteness; but rather, as a human workman would act, tentatively; making small improvements here and slight adaptations there; every form of life, in fact, constantly approaching a more and more perfect adaptation to the circumstances in which it is placed, a perfection which, however, is never absolutely attained.

There are few regions of scientific inquiry more easily open to any observer resident in the country and possessed of ordinary powers of observation than those connected with the fertilization of flowers, and none which would more amply repay careful research by leading to further insight into the still hidden laws which govern the origin of species. To all workers in this field Dr. Müller's elaborate and in every respect admirable work will be an indispensable companion. ALFRED W. BENNETT.

Notes on Scientific Work.

Geography.

The *Gesellschaft für Erdkunde* of Berlin has happily resolved to publish an account of the proceedings of each meeting of the Society immediately after it has taken place, instead of appending this report to their journal, which does not appear till some time afterwards. The first of these *Verhandlungen* is now before us, and contains much that is of immediate geographical interest.

A communication from General Kauffman, from the wells of Aristanbel-Kuduk on the borders of Khiva, describes graphically the country traversed by the main Russian column; and the astronomical positions which were determined on the line of march are appended.

From Dr. Nachtigal in Central Africa two very important papers, bearing date December, 1872, have been received by the Society, and will be published in full in their journal. They describe Bagirmi, a country lying south-east of Lake Chad, and are accompanied by a map, greatly extending the knowledge of this region derived from Dr. Barth's travels. The description of the present condition of the countries lying round Lake Chad is an exceedingly unfavourable one: wars and plundering appear to be going on in all parts and trade is at a standstill. Dr. Nachtigal's intention is to make his way east from Bornu through Wadai, and thence homeward towards Egypt.

Rohlf, the well-known African traveller, has planned an expedition for the exploration of that unknown portion of the Libyan desert which lies south of the depressed region, discovered by him in 1869, between Cyrenaica and the oasis of Siwah. The Viceroy of Egypt has undertaken to defray the costs of the expedition, to which an astronomer, a geologist, and a botanist are to be attached; it is intended to leave Egypt in December of the present year.

An abstract of a paper by Dr. Schneider on the Dutch Residency of Palembang in the south-eastern part of Sumatra gives a good description of the physical geography, fauna, flora, and inhabitants of this part of the East Indies.

Arctic Regions.—The 80th of the series of papers on the progress of geographical research in the Polar Regions, published by Dr. Petermann in his *Mittheilungen*, contains a *résumé* of what is known from all sources respecting the American N. polar expedition under the late Captain Hall, and is accompanied by an elaborate map, in which the results of this expedition, as far as these are known, have been critically compiled, together with data of the former voyagers, Kane and Hayes. The story of the "Polaris" voyage is already well known in England, and no fresh tidings of the ship, which wintered, 1872-73, with the ten remaining members of her company on the coast of Northumberland Island, in lat. 77° 20' N. in Baffin Bay, have reached since autumn of last year. Two vessels however, generously sent by the American Government, have for some time been on their way northward to find and succour the "Polaris" crew.

In his remarks on the general results of this voyage Dr. Petermann draws a remarkable contrast between the advances made by the various expeditions which have been undertaken in steam vessels, and by those in which sledge travelling has been tried; maintaining that, since Hall's expedition has shown that there is no such thing as a permanent covering of ice in this branch of the Polar Sea, sledge travelling is little to be depended on, and steam-ships should alone be employed. The discovery of drift-wood on the shores of Hall land (the east coast of Robeson Strait between 81° and 82° N.) makes it not improbable, Dr. Petermann believes, that the land breaks up here into an archipelago of islands, or at least that there is a communication by which Asiatic drift-wood finds its way hither; and on the other hand the presence of numerous musk oxen in these regions makes it very probable that Hall land is in uninterrupted connection with the coast of East Greenland in Lat. 77° N., explored by the second German expedition of 1870-71.

Zoology.

Cutaneous Exudation of the Water Newt.—The common *Triton cristatus* of our ponds and ditches appears in its natural state and when undisturbed to be scentless, but when alarmed or irritated it emits an odour strongly resembling that of bruised poppy-heads, which is clearly perceptible in the open air and sufficiently powerful to attract the attention of a person coming into a room where the tritons are being operated on. This perfumed exudation seems to be given off equally by tritons in all stages of growth, and in partially dried specimens the poppy-like smell is very powerful and pungent. If the animal be exposed to the vapour of chloroform a viscid fluid exudes from the pores of the skin collecting over the wet surface after death in a kind of slime which when touched by any abraded portion of the hand causes momentarily acute pain; this acrid fluid can be made to exude from the tuberculated parts of the skin by gentle pressure with the finger. This fluid, moreover, has an acrid taste, produces a feeling of numbness in the tongue, and causes a sensible degree of inflammation in the mucous membrane of the lips and mouth which lasts for some hours and is accompanied by a sense of dizziness and stupor. An analysis of the slime showed it to be similar in composition to serum as regards its chief constituents; the exact nature of the acrid principle was not ascertained, but it appears to have no alkaloid character and to be highly volatile, corresponding in these particulars with the exudation from the skin of the common toad described by Dr. John Davy. The effect of the exudation when discharged direct from the skin of the triton upon the subject of experiment seems usually to be far more powerful than when applied artificially and fully to justify the popular prejudice against these creatures. On the tritons themselves the effect appeared to be painful and stupefying. On a healthy cat there was copious discharge of saliva and foam, and violent and audible action of the jaws. When placed on a human tongue the first effect was a bitter astringent feeling in the mouth with irritation of the upper part of the throat, numbness about the teeth more immediately in contact with the fluid, and a strong flow of clear saliva followed by foaming and violent spasmodic almost convulsive action of the muscles of the mouth; these symptoms were followed by headache lasting for some hours, general discomfort, and in half an hour slight rigor. A paper on this subject, embodying the above facts, by Eleanor A. Ormerod, has just been published in the *Journal of the Linnean Society*, vol. xi, No. 56, pp. 493-496.

Notes on Reptiles, by Prof. Barboza du Bocage.—In No. 1 of these Notes Prof. Bocage describes an interesting collection of Reptiles collected by M. Lecomte in New Caledonia: among them are two new species of the genus *Rhacodactylus*, viz.—*R. aubrianus* and *R. trachyrhynchus*; a new genus and species *Ceratolophus hexaceros*; and a new species of *Lepidodactylus*, *L. neocaledonicus*. Specimens of the rare *Rhacodactylus leachianus* and *Correlophus ciliatus* are also in this collection.—In No. 2 will be found notes on some new rare or little known Reptiles and Batrachians from Eastern Africa. Eleven new species are described: *Hemidactylus cessacii* Saint Jago, *H. gutturalis* Bissau, *Scapsus copei* Benguella, *Typhlacontias punctatissimus* (gen. et spec. nov.) Mossamedes, *Calamodops polylepis* Angola, *Prosymna ambigua* Mossamedes, *Psammophylax ocellatus* Mossamedes, *P. viperinus* Benguella, *Siphonops thomensis* St. Thomas, *Hyperolius huillensis*, *Huilla* and *Hylambates Anchidæ* Mossamedes. *Feylinia currorii* Gray is also redescribed. In No. 3 of the Notes we have *Lioscincus steindachnerii* (gen. et spec. nov.) from New Caledonia; *Lygosoma deplanchei* (spec. nov.) and *Tropidoscincus aubrianus* (gen. et spec. nov.) also from New Caledonia, and *Ophiocercus nasutus* (gen. et spec. nov.) from Australia. The physiognomy of the last described species is very peculiar, almost establishing a trace of a new and intimate union between the Saurians and Ophidians.

Double-headed Snake.—Dr. Dobson exhibited (*Proc. Asiatic Soc. Bengal*, January, 1873) a very remarkable double-headed form of *Lycodon auicularis*. The specimen had almost the appearance of two snakes fused into one at a short distance behind the neck, as each head was perfect and was joined by a distinct neck with the body. Before

becoming completely united the twin necks are connected by a band of skin extending about midway between the posterior extremity of the head and the point of complete union in one body.

Cheloptera.—The same indefatigable zoologist publishes a description of a very remarkable new species of *Molossus* (*Nyctinomus*) *M. johorensis* from Johore (*Proc. Asiatic Soc. Bengal*, January, 1873) as well as Notes on the genera *Murina* and *Harpyiocephalus*, of Gray. The latter genus must be united with the former, which will then contain five species, forming a very natural group readily distinguished from all other genera of Vespertilionidae by the peculiarly shaped projecting nostrils taken in connection with the dental formula (*Proc. Asiatic Soc. Bengal*, May, 1873). In the same number of the *Proceedings* Dr. Dobson gives an abstract of a memoir to be published by the Society "On the Asiatic species of *Molossi*." The paper commences with an account of the distribution of the species of this very remarkable and well defined group. Of the five genera of the group two only, *Nyctinomus* and *Chiromeles*, are found in the continent of Asia and its islands. Six species belonging to these genera are described, of which one half are new. By far the greater number of species belong to the genus *Molossus* and are confined to the Western world.

European Spiders.—Prof. T. Thorell completes his work intitled *Remarks on Synonyms of European Spiders* by the publication of part 4. This most useful work forms an octavo volume of more than 600 pages and contains synonymical remarks:—1. on the spiders described in Westring's *Araneae Suecicae*; 2. on the spiders described in Blackwall's *History of the Spiders of Great Britain and Ireland*; 3. on some of the spiders described in Simon's *Catalogue Synonymique des Aranéides d'Europe*. In calling attention to this work, we can heartily endorse the opinion of the Rev. O. P. Cambridge that in the compilation of the synonyms the greatest care and accuracy has been shown in determining the identity of species described by various authors. Prof. Thorell has not contented himself with the descriptions alone, but has in many cases compared typical examples from different parts of Europe with great pains and acumen. The date of establishment of both genus and species is prefixed, and the work is one that will prove indispensable to the student of European spiders.

Chemistry.

The Action of Heat on Diamond and Graphite.—To the current number of *Poggendorff's Annalen* (1873, No. 4) a peculiar interest will attach itself, as it contains the last paper of Gustav Rose. Some ten years after the death of his illustrious brother Heinrich, the chemist, the scientific world now sustains an equal loss by the death of the great mineralogist.—One of the leading questions that called for an investigation which has been extended over several years was the theory, held by many and doubted by others, that the diamond can be blackened by intense heat. In the first experiment Rose placed diamonds between carbon points in an exhausted tube and subjected them to the action of one of Siemens' dynamo-electric apparatus. The crystal in each case became red hot and flew to pieces by the too sudden application of heat, but on the surface was found a black crust, a hair in thickness, which would mark paper and proved to be graphite. Another crystal of diamond, enclosed in a piece of dense coke and placed in a plumbago crucible packed with charcoal powder, was heated for half an hour in one of Siemens' regenerative furnaces to the temperature at which cast iron melts without undergoing any change whatever. Another diamond, a cut (rose) diamond, which was enclosed in a crucible as before and heated for ten minutes in the furnace to a temperature at which wrought iron melts, retained its form and the smoothness of its facets but became quite black and opaque and exhibited a strong metallic lustre. The black portion formed a distinct layer of the thickness of a hair covering the unaltered substance within. These results confirm those of Schrötter and appear to justify the view that diamond, though it undergoes no change when exposed to the greatest heat of a porcelain furnace or that at which cast iron melts, is slowly converted at the temperature of molten wrought iron into graphite. When heated in contact with air in a muffle the diamond exhibits another remarkable change: there are developed on the octahedral and cleavage planes regular triangular depressions that resemble those occurring in abundance on the fine crystals from the Vaal River and recall the faces formed on planes of crystals, soluble in acid, by the slow and imperfect etching action of such a reagent; as, for example, the action of hydrogen chloride on calcite. Like them, these depressions on the diamond bear an exact relation to the crystalline form and are determined by certain definite faces, their sides being parallel to the edges of the octahedral faces of the crystal. Measurement with the goniometer showed them to belong to the icositetrahedron, the faces of which have not been met with on diamond. These symmetrically shaped pits can easily be seen by heating a thin plate of bort in a blow-pipe flame and examining it under the microscope. By prolonged heating several small triangular pits will often merge into one large one. A crystal of diamond, even when so reduced in size by oxidation as to be only visible with difficulty, continues to exhibit sharp edges and angles; the

paper is illustrated with drawings of such crystals. A dodecahedron with very rounded faces but smooth and brilliant surface also exhibited the triangular pits often very distinctly; moreover it had a brown colour which was not destroyed by heat, and must therefore be of a totally different nature from that of the topaz or smoky quartz. Returning to the blackening of the surface by heat the author states that some of the specimens of diamond in the Berlin Collection appear quite black by reflected though translucent by transmitted light and that this black substance lying in the little irregularities of the surface is found by its behaviour in fused nitre to be graphite. The relative ease with which graphite and diamond burn was determined by exposing them to the same temperature for the same time when the following amounts of the three specimens mentioned below were consumed:—

Foliated graphite	27.45 per cent.
Diamond	97.76 "
Granular massive graphite	100.0 "

The Solubility of Ozone in Water.—Carius published a paper some short time ago in which he showed that, contrary to the views of most chemists, ozone is absorbed unchanged and to no inconsiderable degree by water. As ozone is always mixed with a large excess of oxygen and this mixture does not remain of a constant composition for any length of time the determination of the coefficient of absorption of ozone by water is not an easy problem. Carius has recently been led by comments of other chemists on his former paper to repeat and continue his research in this direction (*Ber. Deut. Chem. Gesell. Berlin*, 1873, No. 12, 806). He gives the preference to Houzeau's method with the silent discharge for the preparation of ozone, as it yields, when oxygen is taken, a gas very rich in ozone, and, when air is chosen, less nitrous acid than when visible sparks are used. In three experiments 100° of liquid at 0° and 0.76 contained in addition to oxygen 1.346%, 0.910% and 0.748% respectively of absorbed ozone. The amount taken up by water decreases very rapidly as the temperature rises: one experiment proved that at 16° 5 and 0.7358 100° absorb 0.611% of ozone. When air was used in place of oxygen the water contained some nitric acid, due no doubt to the oxidation of the nitrous acid by ozone. Rain water without doubt contains ozone, though the pressure exercised by this constituent of the atmosphere is so small that it is highly improbable we could detect its presence even were the air strongly ozonised.

Combination of Ethylene and Acetylene.—L. Prunier read a paper at a recent meeting of the *Société chimique* of Paris on the combination of these hydrocarbons which takes place when they are passed through a tube raised to an incipient red heat. The product C_4H_6 forms with four atoms of bromine a tetrabromide, $C_4H_6Br_4$, which melts at 113–115° and appears to be identical with the compound the condensation of which Caventou noticed when illuminating gas is subjected to pressure, and the product obtained by Henninger by the reduction of erythrite.

"Pinallinic Acid."—The acid of Friedel and Silva, $C_8H_{10}O_2$, formed by the oxidation of pinacolin is believed by Butlerow to be identical with the trimethylacetic acid that he obtained synthetically from trimethylcarbinol and which melts at 34–35° and boils at 161°. The former observers in a paper read before the *Société chimique* state that during a number of experiments with the acid they did not notice so high a melting point, and treatment with anhydrous phosphoric acid in the cold did not produce a change. Heat caused decomposition and the formation of hydrocarbons and an ethereal product. By fractional distillation however it appears that the melting point rose to 30° and the boiling point to about 163°. The most volatile portions of the crude acid contained a very small amount of acetic acid. A number of salts of the acid were prepared and analysed; among them the characteristic copper salt. The acid is yielded in almost theoretical amount by the oxidation of pinacolin. They now consider that it is probably identical with trimethylacetic acid and attribute the difference in melting point to the presence of impurity in the material examined. Pinacolin and pinacolin have a constitution normally derived from the acetone formula and a modification in constitution only occurs when the oxidation of pinacolin to trimethylacetic acid takes place. It is not probable that so slight a reaction as the hydrogenation of acetone should cause a constitutional atomic change, though it may be more readily conceived in the case of oxidation.

Reduction of Carbonic Acid by Iron Phosphate.—It has been ascertained by E. N. Horsford (*Sitzer. Wien. Akad.*, 1873, 91) that an ethereal extract of green leaves, which has been separated by hydrogen chloride into two layers, a yellow and a blue layer, contains in both portions phosphoric acid, iron, potassium and calcium. He has further observed that a mixture of sodium phosphate and iron protosulphate in presence of water is able both in light and darkness to reduce carbonic acid to carbonic oxide. From these observations it appears probable that the formation of a solution of a phosphate of iron protoxide may be a preliminary stage towards the production of vegetable tissue from the elements of carbonic acid, water and ammonia. Formic acid, it is well known, may be formed by the direct combination of carbonic oxide and water.

Lime-Magnetite.—In a recent number of the *Phil. Magazine* (vol. xlv., 455) Dr. Percy describes a crystallised compound formed by heating iron peroxide and lime in equivalent proportions to whiteness for several hours in a muffle, the atmosphere of which is oxidising. The product has a bright metallic lustre and is made up of acicular crystals exceeding an inch in length; it is very brittle, is magnetic, and has a specific gravity of 4.693. When prepared in larger quantities from haematite and chalk crystals more than two inches long were produced. They have not yet been measured. Dr. Percy regards them as magnetite the iron protoxide of which is replaced by lime.

Kjerulfine.—Von Kobell has described (*Ann. Prakt. Chem.*, 1873, Nos. 5 and 6, 272) under this name a new mineral species from Bamle, in Norway. It has the formula $2\text{Mg}_3\text{P}_2\text{O}_8 + \text{CaF}_2$, a small portion of the calcium being replaced by sodium. It is nearly allied to wagnerite, which however contains very little or no calcium.

Writing from Cambridge, Mass., as correspondent to the current number of the *Ber. Deut. Chem. Gesell. Berlin*, W. Gibbs reports on the continuation of his researches on the hexatomic compounds of cobalt.—He has also found that the higher alkaloids form an extensive series of compounds with phosphoric or arsenic acid and the oxide of a metal of the magnesium group which belong to the type of the well-known di-magnesium-ammonium phosphate. Most of them crystallise exceedingly well and are more soluble than the ammonium salt. The alkaloids employed were strychnia, brucia, morphia, codeia, and narcotine. The cadmium salts are most distinguished for their beauty; uranium oxide forms a similar series. These salts are characterised by a remarkably sparing solubility in water and alcohol and may play an important part in analytical operations.—F. H. Williams is examining in the laboratory of Prof. Crafts the action of nascent hydrogen on carbon. He conducts the gas developed by the action of hydrogen chloride on cast iron through tubes cooled with ice and salt and then into bromine. The fluid products, he has found, commence to boil at $9^\circ.5$ and the boiling point rises gradually to 155° . They have the odour of garlic, turn brown in the light, and contain carbon, hydrogen, and chlorine. The bromine compounds boil between 120° and 179° , at which temperature hydrogen bromide is evolved. Details of this research have yet to be published.

New Publications.

- ASKENASY, E. Botanisch-morphologische Studien. Heidelberg: Winter.
- BOLTZMANN, L. Experimentelle Bestimmung der Dielectricitäts-constante von Isolatoren. Wien: Gerold's Sohn.
- BROCA, P. Sur le plan horizontal de la tête et sur la méthode trigonométrique. L'angle alvéolocondylien et l'angle biorbitaire. Paris: Hennuyer.
- CLOS, M. D. Des caractères du péricarpe et de sa déhiscence pour la classification naturelle. Toulouse: Douladoure.
- COLLENOT, J. J. Description géologique de l'Auxois. Dijon: Manière-Loquin.
- DE ZIGNO, A. Flora Fossilis formationis oolithicae. Vol. II. Padova: Tip. del Seminario.
- DOMALIP, K. Zur mechanischen Theorie der Elektrolyse. Wien: Gerold's Sohn.
- EHRENBERG, C. G. Mikrogeologische Studien ueber das kleinste Leben der Meeres-Tiefgründe aller Zonen und dessen geologischen Einfluss. Berlin: Dümmler.
- EMMERT, E. Gesichtswahrnehmungen und Sinnestäuschungen. Bern: Jent und Reinert.
- FOERSTER, W. Bericht der Sternwarte zu Berlin (1867-1871). Berlin: Dümmler.
- FOURNIER, E. Sertum Nicaragense. Fasc. i. Filices. Paris: Martinet.
- GAUDRY, A. Considérations sur les mammifères qui ont vécu en Europe à la fin de l'époque miocène. Paris: Martinet.
- GRAUDEAU, M. L. Recherches sur le rôle des matières organiques du sol dans les phénomènes de la nutrition des végétaux. Nancy: Berger-Lévrault.
- HARTMANN, J. Humanität u. Religion. Leiden: Brill.
- HEULOT, E. Etudes sur un cinchona succirubra des Indes anglaises. Boulogne: Bover.
- HIS, W. Untersuchungen über das Ei und die Entwicklung bei Knochenfischen. Leipzig: Vogel.
- HORNSTEIN, C. Magnetische und meteorologische Beobachtungen auf der Sternwarte zu Prag (1869-1871). Prag: Calve.
- KASTNER, F. Expériences nouvelles sur les flammes chantantes et invention du pyrophone. Paris: Chaix et Co.
- MARCHAND, Dr. E. Étude-historique et nosologique sur quelques épidémies et endémies du moyen âge. Paris: Delahaye.
- MÜLLER, J. P. Leitfaden für den methodischen Unterricht in der Botanik. 1 Theil. Morphologie und Physiologie. Remscheid: Krumm.

- PLANTAMOUR, M. E. Résumé météorologique de l'année 1872 pour Genève et le Grand Saint-Bernard. Genève: Ramboz et Schuchardt.
- REDTENBACHER, L. Fauna austriaca. Die Käfer. Hefte 8 und 9. Wien: Gerold's Sohn.
- SCHOLZ, A. J. L. F. Eine Ansicht über den Zusammenhang der Imponderabilien und einige daraus abgeleitete Folgerungen. Klausenburg: Stein.
- SEMPER, C. Reisen im Archipel der Philippinen. 2 Theil. Wissenschaftliche Resultate. 3 Band. Landmollusken. 2 Heft. Wiesbaden: Kreidel.
- SIGWART, Chr. Logik. 1 Bd. Tübingen: Laupp.
- VAHLEN, J. Jahresbericht ü. die philosophisch-historische Classe der k. k. Akademie der Wissenschaften. In Comm. Wien: Gerold's Sohn.
- VON LANG, V. Spiegelgalvanometer mit regulirbarer Dämpfung. Wien: Gerold's Sohn.
- VON LITTRON, K. Zur Kenntniss der kleinsten sichtbaren Mondphasen. Wien: Gerold's Sohn.
- VON REUSS, A. E. Paläontologische Studien über die älteren Tertiärschichten der Alpen. Wien: Gerold's Sohn.
- WALLER, T. H. and PROCTER, H. R. Kohlrausch's Introduction to Physical Measurements with Appendices on Absolute Electrical Measure. Churchill.
- WECHNIKOFF, T. Troisième section des recherches sur les conditions anthropologiques de la production scientifique et esthétique. Paris: Masson.
- WEINKAUFF, H. C. Catalog der im europäischen Faunengebiet lebenden Meeres-Conchylien. Kreuznach: Voigtländer.
- WEISS, E. O. M. Die metaphysische Theorie der griechischen Philosophie nach ihren Principien dargestellt. Dresden: Adler.
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History.

Registrum Palatinum Dunelmense. The Register of Richard de Kellawe, Lord Palatine and Bishop of Durham, 1311-1316. Edited by Sir T. D. Hardy, Deputy Keeper of the Public Records. Vol. I. (Rolls Series).

THIS volume comprises the first portion of the earliest register extant belonging to the episcopal palatinate of Durham. In England there were only three palatinates, properly so called, those of Chester, Lancaster, and Durham, the last being the most ancient of the three. A palatinate is defined as a territory throughout which its proprietor enjoys certain royal rights and privileges, commonly called *Fura Regalia*, as fully and entirely as a sovereign himself does elsewhere within the realm, in which such territory is situated. Thus the bishops of Durham exercised the right of having their own courts of chancery, exchequer, and admiralty (as well as holding pleas of the crown, pleas of land, &c.), and also a court of wards and liveries. They appointed all the officials, issued all the writs, coined money, received the forfeitures and escheats, held councils in the nature of parliaments (Durham returned no members to Parliament till the reign of Charles II.), granted charters, &c. The question therefore naturally arises, when and how did the bishops of Durham obtain all these powers? To answer the question requires a detailed inquiry into the history of both the bishopric and the palatinate, and Sir T. Hardy has given a sketch of the results of his inquiry in the preface to the present volume, reserving an account of Bishop Kellawe himself for the next.

The investigation is rendered difficult by the fact that the see of Durham does not possess one original episcopal record of ancient date; all its Saxon and Norman grants have been lost, probably owing to the infamous conduct of Bishop Cosin's executors, who burnt eight or nine large chests of documents belonging to the see, for the purpose of preventing any disputes which might arise about the bishop's estates. Bishop Cosin had made the history of the church of Durham his peculiar study

and for that purpose had taken into his possession, for the purpose of compiling a work on the subject, all the grants to the see from its earliest period. These he seems to have abridged in the book which he compiled under the title of *Liber Rubens*, but he never returned the originals into the archives of Durham, and these valuable muniments no doubt were among those which were consumed in the executors' fire. When Edward I. inquired into the origin of the rights of the see, the famous Bishop Antony Bek replied that his predecessors had exercised all these powers from the times before the Norman Conquest without any interruption whatever. And in this view Sir Thomas Hardy is disposed to acquiesce. He derives these privileges from the reverence paid to S. Cuthbert, whose body, when the Danes destroyed Lindisfarne, was transferred by Bishop Eardulf to Durham. The British Museum possesses a most extraordinary memorial of this in the book of the Four Gospels with an interlineary Dano-Saxon version (MS. Cotton, Nero, D. iv.), which during the flight fell into the sea and was some time afterwards found upon the coast; the stains on the back seem still to bear witness to its immersion. S. Cuthbert's services in enabling Alfred to repel the Danes are well known (we need only refer to the account in the second canto of *Marmion*), and successive kings heaped privilege after privilege on the favoured place where the saint's relics rested;

"There deep in Durham's shade
His reliques are in secret laid;
But none may know the place,
Save of his holiest servants three,
Deep sworn to solemn secrecy,
Who share that wondrous grace."

Symeon of Durham, the historian, speaks at large of the donations made by the Kings Alfred and Guthred, comprising the lands between the Tyne and the Tees; and even if the original donation were as fictitious as that of Constantine to Sylvester, yet the gradual growth of such an extensive palatinate would equally attest the reverence paid to the great national saint of the North. Sir T. Hardy traces the history of both bishopric and palatinate down to modern times, pausing to dwell more at length on bishops like Antony Bek, or on the attempt made by Act of Parliament in the reign of Edward VI. to subvert the palatinate entirely, by dividing the bishopric into two (the Act, never printed before, is inserted here by the editor), or on the attempt to found a university in Cromwell's time, which was favourably regarded by the Protector, but which Oxford and Cambridge successfully resisted, dreading a rival at Durham, as in other ages at Stamford, or in our times at London. It is curious that when the English set up a university at Caen, in Henry VI.'s reign, Paris sent a letter to Oxford, as to a friendly place of education, remonstrating against this attempt at rivalling the mother university of France and of Europe. Even Bishop Butler stood up firmly for the independent rights of the see; but at Van Mildert's death the palatine jurisdiction was detached from the bishopric by Act of Parliament, and thus this ancient episcopal palatinate, after it had been in existence in its various forms for more than one thousand years, was dissolved, and its immense temporal powers, which had been often viewed with distrust and assailed by many of our sovereigns, merged into the crown.

The MS. now published has had a fortune of its own. It was borrowed in 1640 by an agent of the Earl of Newcastle for the purpose of some lawsuit affecting the property of the Earl, but was never returned. Somehow it fell into the hands of the Earl of Oxford, who parted with it to Osborne the bookseller; he sold it to Rawlinson, and it passed with the rest of that antiquary's collection to the Bodleian. Oxford honourably restored it

to Durham, and in 1868 it was, with the other muniments belonging to the palatinate, removed to the Record Office in London. - It is now printed as being of more than local importance, for it abounds with striking and valuable materials illustrative of the general history of England. Thus there is much about Robert Bruce's war with Edward II., and one of the last documents in the present volume is a letter from the Cardinals at Carpentras, describing the outrages perpetrated by the Gascons when the conclave met to elect a successor to Clement V. Many instances occur of the rapacity of the Avignon popes; and the general course of public business in the reign of Edward II. is illustrated in innumerable particulars. The details of public affairs in the Middle Ages have received less attention than they deserve. The deeds of the great nobles as described by Froissart, the monastic life as told by church historians, did not really concern the mass of mankind. The public and social life of those times is only gradually finding historians, the materials for its history are only now being printed. But our editor has reserved for the preface of his second volume the instances which he has collected to show how Kellawe's Register elucidates general and particular history, civil as well as ecclesiastical; and we shall hope to report his conclusions at no great length of time. At the end of the preface a number of passages are collected where the reading of the MS. seems to be corrupt. Some of them may be corrected from similar clauses occurring in other documents contained in this volume: e.g. p. 39 *praemissa extendi*, *read* *exercendi* (*c* and *t* are much alike in MSS. and the curled upward stroke for *r* is sometimes very faint); p. 53 *nec in praemissis a juris casibus*, *read* *permissis a jure*; p. 141 *de qua cujuscumque toto tenore.....aut defectum*, *read* *cujusque.....defectu*; p. 143 *inductum solvi*, *read* *judicatum*; p. 165 *et circiter vos*, *read* *et circa ea nos*. Several other passages need a better punctuation, and indeed if we had any complaint to make about the edition it would be that it was over-punctuated, the multitude of commas being sometimes prejudicial to the sense.

The earliest document referred to in the volume is a record of Henry I.'s time (p. 8), concerning the fishery of the Tyne, made before the famous Walter Espec, then justiciary: "*Tertia pars aquae erit communis et libera; et eadem aqua mensurari debet ad mayne flood, quando eadem aqua fluit, ut sit plena de banke en banke.*" In p. 26 the following description of a seal occurs: "In quo sigillo, quasi rotundo, de cera rubea, erat quasi quoddam scutum, in quo etiam scuto erant quasi tres cupae, in cujus circumferentia erant literae sic dicentes, Sigillum Gerardi de Aldenard." In p. 90 mercatoribus de societate Peruch. should be explained in the margin as "the company of the Peruzzi" at Florence, whose large loans to Edward III. afterwards led to a sort of general bankruptcy in that city. There are numerous licences of non-residence to clergymen for the purpose of studying in some place "*ubi Generale viget Studium*:" in p. 197 a scholar of Merton Hall, Oxford, is allowed to enter holy orders, notwithstanding that he is a born bondman of the bishop; we are reminded of the clause in Henry II.'s Constitutions of Clarendon which forbids the ordination of a serf without the consent of his lord, an old rule which we find also in Ireland and France. In p. 346 is a certificate that John le Lorimer of Auckland was born without a left ear, and had not lost it for crime. In p. 462 a cleric imprisoned for robbery is admitted to clear himself by the oaths of seventeen compurgators, "*cum quartadecima manu sacerdotum et tertia manu clericorum.*" In p. 296 a tournament is forbidden. In p. 300 there is a safe-conduct for Henry Baker, "*gardein et menur des vitailles*," who was taking provisions to London by sea for the use of the bishop during his stay at the Parliament there.

We could wish that the early registers of other dioceses might meet with such editorial care. Exeter for instance has a register of still earlier date, beginning 1257. The Chapter of Exeter contains members who would do the work well, and we hope that they will some day give us the early episcopal registers of the West—more than half a century earlier than those of Durham, and very important for the history of Western England.

C. W. BOASE.

Historical Essays. By Edward A. Freeman, M.A., Hon. D.C.L., late Fellow of Trinity College, Oxford. Second Series. London: Macmillan and Co. 1873.

STUDENTS of history, as well as the general reading public, will, we doubt not, receive with hearty welcome this second series of Mr. Freeman's *Historical Essays*, and will find them to fall short in nowise of the attractive style, the erudition at once varied and accurate, and the power of trenchant and perspicuous exposition, which so strikingly distinguished its predecessor. Considering the very large number of topics which are dealt with in the nine essays making up the present volume, the treatment of any one of them in a manner at all approaching to exhaustiveness was of course out of the question. Mr. Freeman, however, is uniformly careful not to put forward any conclusion, without briefly estimating the authorities, and stating the reasons which helped him towards its formation. Many particulars of literary history and criticism, the appreciation it would be just to form of many prominent actors upon the stage of human affairs, are still, and are likely long to remain objects of controversy. Some of these problems Mr. Freeman applies himself vigorously to attack and to solve. His acknowledged talent and well-earned reputation fairly entitle him to undertake tasks with which the strength of but few literary champions is equal to contend.

Among these, it is enough to mention the Homeric question, upon which, perhaps the knottiest of modern controversies, Mr. Freeman conceives that he has worked out a decision which may claim to be accepted as final. The authorship of the two epics is, according to him, one and indivisible. Indeed he goes so far as to declare that the Homeric controversy no longer exists. Unfortunately for this assertion, those who would introduce more or less of disintegration into the *Iliad* and *Odyssey* cannot be reduced to silence, witness the recently published essay of Bonitz, and Mr. Paley's preface to the second volume of his edition of the *Iliad*. Nay more, so high pitched is Mr. Freeman's Homeric orthodoxy, that he takes the Attic poets sharply to task for departing from the canonical authority of the two epics in their scenic presentments of the heroes of the Troic cycle. He even ventures a conjecture, that Homer, as a boy, might have seen in the flesh the much enduring divine Ulysses. The comparative sketch of the three earliest Greek historians, with which the third of these essays commences, is, as a whole, particularly just and discriminative. One statement, however, bearing upon the merits of Thucydides, we cannot help thinking far too highly coloured. "There is hardly a problem in the science of government, which the statesman will not find, if not solved, at any rate handled in the pages of this universal master." Had then the Attic historian any conception of the vast development and complicated life of a great nation, as compared with the narrower range of the Hellenic πόλις, of the momentous political and social import of the commercial and industrial classes, of the manifold perplexities springing from the interactions and collisions of civil and ecclesiastical power? Mr. Freeman, however, virtually cancels his transcendental eulogium of the greatest of ancient historians, by the admission that he is not a quite perfect expositor of the lives and actions of his

own contemporaries and countrymen. Everyone capable of forming a rational judgment will side with Mr. Freeman's refusal to place the pupil of Aristotle, the leading man of the Hellenic race, the propagator of Hellenic culture, in the same category with Attila and Timur, the barbaric autocrats of savage hordes. But it is to be feared, that the want of contemporary authorities, and the many discrepancies occurring in those which have come down to us, must throw almost insuperable difficulties in the way of such an appreciation of Alexander's personal character as shall meet with universal acceptance. The brilliant and comprehensive summary of the rise, the consolidation, and the universal spread of Roman domination forms perhaps the most noteworthy portion of the present volume. Admitting, however, as Mr. Freeman virtually admits, that the imperial phase of Roman power was a necessary evil, or at all events the least in a choice of many evils, the sweeping moral reprobation with which he stigmatizes it loses much of its force and significance.

GEORGE WARING.

Luis de Leon und die spanische Inquisition. Von Dr. Fr. H. Reusch, Professor der Katholischen Theologie an der Universität in Bonn.

THIS book is an expansion of a lecture on Luis de Leon, with the addition of carefully compiled appendices. Its value consists in the minute and accurate account given of the process of trial, lasting over five years, at the end of which the eminent professor of Salamanca was declared innocent. He had been accused by some jealous rivals in the University itself, and the two main charges against him concerned the account he had given of the Vulgate, and an unpublished translation of the Song of Songs. He was not badly treated except that the close confinement affected his health, and he once complains of being starved. The lingering five years' trial was however suffering enough for an innocent man. When we hear that Melchior Cano and Arias Montano underwent similar danger, and that even Saint Theresa and Saint John of the Cross narrowly escaped it, we see what a tyranny the Inquisition exercised, so that Döllinger (to whom Reusch dedicates the book) can say that it "crushed out true science in Spain." Bishop Hefele in his *Life of Cardinal Ximenes* tries, somewhat unfairly, to throw the chief blame on the Monarchy which set such a remorseless engine to work. When Luis de Leon resumed his lectures at Salamanca he made no allusion to the past five years, but simply began with "heri dicebamus," in which he has been copied by a professor in a modern university. Professor Reusch supplies just the detailed inquiry into a special case, which of course Llorente could not give in his more general account, when writing his *Critical History of the Spanish Inquisition*.

C. W. BOASE.

Notes and Intelligence.

Mr. Palmer has published in two bulky volumes (Trübner and Co.) further documents illustrative of the history of Nikon. The first of these is taken up with extracts from the travels of Macarius, Patriarch of Antioch, who visited Russia twice: once during the supremacy of Nikon, and once to take part in the synod which deposed him. The narrative of the first journey was written after the return from the second, and therefore is unimpeachable evidence whenever it tells in favour of Nikon. It is supplemented with extracts from Solovieff bearing upon the troubles of Alexis' accession and upon the Polish war; the last is treated too briefly to be intelligible, and from Denisoff upon the Raskolniks, who did not object to Nikon's correction of palpable errors in the service-books, but to his persistent efforts to reduce the Russian Church to exact conformity to the Greek than the Greek Patriarch of Constantinople desired. The Russian Church, even before Nikon's reforms, was stricter and purer than the Greek, although it was yet more ignorant, and had attached itself to a number of accidental symbolisms to which a party was disposed to cling in a spirit of schismatical nationalism. Most of the third volume is taken up with

Paisius Ligurides' History of the Deposition of Nikon, now first published from the MS. in the Synodal Library at Moscow, used by Mouravieff in his history.

Mr. Palmer promises to return to the subject. When he does so it is to be hoped that he will not content himself with establishing that the Russian state was Erastian, Russian courtiers tyrannical, Greek Patriarchs venal, that Nikon had not a fair trial, and was in the right in the special points in dispute. To understand the matter as a whole we need to know whether a wise man would have accepted the position in which Nikon encouraged the Tsar to place him, whether Nikon having accepted it used it with a wise man's sense of its danger, and whether it is safe to judge of the case so exclusively as Mr. Palmer seems inclined to do from Nikon's evidence: Nikon was doubtless an honest man, and Paisius was a rogue, and almost certainly had been a profligate, but a rogue sometimes sees more of a case than an honest man under persecution who insists upon the points which suit him till he loses sight of all the rest.

Father Morris has published (Burns, Oates, & Co.) under the title of *Troubles of our Catholic Forefathers* a first series of extracts from family papers (in this volume the Babworths, Southcotes, and Tichbornes are the chief contributors). The pleasantest part of the book is the homely details about the Ursuline convent at Louvaine and the daughter house at Bruges, both of which were largely peopled by refugees from England; but most of the space is taken up with instances of the sordid harassing persecution for fear of which most of the English gentry gave up the religion they preferred, and which most Englishmen would gladly forget now that it has served its purpose. These are relieved in some measure by the cheerful, ingenious constancy of the minority, who escaped destruction by the intermittent clemency of the court. Their memory would have been more attractive if they had been less ready to collect or imagine "judgments" on the wretched class who made a trade of giving effect to the tyrannical laws enacted to gratify the fanatical bourgeoisie and parvenu landowners, whose delegates then spoke in the name of the Commons of England.

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- AVEZAC, M. de. Année véritable de la naissance de Christophe Colomb et Revue chronologique des principales époques de sa vie. Étude critique. Abbeville: imp. Briez, Paillard, et Retaux.
- BEITRÄGE zur Entdeckungsgeschichte Afrika's. 1 Hft. Berlin: Reimer.
- BOUTIOT, T. Histoire de la ville de Troyes et de la Champagne méridionale. Tome III. Paris: Aubry.
- CARAMAN-CHIMAY, LE PRINCE E. DE. Gaspard de Coligny, amiral de France, d'après ses contemporains. Paris: Beauvais.
- CODEx DIPLOMATICUS ANHALTINUS. I. 3. Hrsg. von Prof. Dr. Heinemann. Dessau: Barth.
- CURTJUS, E. Philadelphiea. Nachtrag zu den Beiträgen zur Geschichte u. Topographie Kleinasiens. Berlin: Dümmler.
- DAUMER, G. F. Kaspar Hauser. Sein Wesen, seine Unschuld, seine Erduldgn. u. sein Ursprung. Regensburg: Coppenrath.
- DECLÈVES, J. Du serment et de sa formule. Étude historique depuis les temps les plus anciens jusqu'à nos jours. Bruxelles: Muquardt.
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- FICKER, J. Ueber die Entstehungsverhältnisse der Constitutio de Expeditione Romana. In Comm. Wien: Gerold's Sohn.
- FONTES rerum bohemicarum. Tom. I. Vitae Sanctorum. Fasc. 4 et 5. Prag: Grégr und Dattel.
- FRÉSON, J. La justice au xvii. siècle dans le Comté de Namur. Bruxelles: Muquardt.
- GÉRARD, P. A. F. Étude sur les origines féodales. Bruxelles: Muquardt.
- HAENEL, G. Juliani epitome latina novellarum Justiniani. Leipzig: Hinrichs.
- HUBER, A. Rudolf v. Habsburg vor seiner Thronbesteigung. In Comm. Wien: Gerold's Sohn.
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Philology.

Oriental and Linguistic Studies. The Veda; the Avesta; the Science of Language. By William Dwight Whitney, Professor of Sanscrit and Comparative Philology in Yale College. New York: Scribner & Co. 1873.

SCIENTIFIC intercourse between America and Europe, and particularly Germany, is not so close and constant that all the American journals, in the contents of which we might be interested, can be expected to reach us. Professor Whitney therefore has a strong claim on our gratitude for having made some of his shorter studies accessible to the public in a collected form, and we can only hope that the present volume may meet with such a reception as will encourage the author to republish in the same way some of his other short articles, especially those on accent in Sanscrit.

The first five essays in this volume treat of the Veda. They are better calculated than any other work to serve as an introduction and help to beginners in the study. They present with sober clearness the consolidated results of scientific inquiry, and do not hesitate to indicate the gaps in our knowledge. In the first we have to notice that the term *stauhika* (p. 14) should be replaced by *uttarārcika*. The second, "The Vedic Doctrine of a Future State," introduces us to an important group of ancient conceptions, possessing great interest for the anthropologist, and at the same time gives an example of how the Veda ought to be explained, by itself, not by Indian tradition. The third article, "Müller's History of Vedic Literature," criticises an important work of Max Müller's in a manner at once generally intelligible, and, to our thinking, perfectly just. Whitney acknowledges Müller's great merits in the warmest terms (p. 73) where he says: "There are few other scholars living who can walk with so firm and confident a step through the whole wide-extended field of the Hindu sacred lore, a field hitherto almost pathless in its obscurities and in great part unattrac-

tive in its barrenness :” but he is equally decided in rejecting some of Müller’s assumptions, which have no firm foundation in fact, notably his attempt to fix the date of the Veda (p. 73 ff.). It is important to insist again and again upon the uncertainty of the chronology of the Veda, because otherwise an unfounded opinion might easily acquire, in the course of years, an appearance of authority. The fourth essay, “The Translation of the Veda,” discusses a controversy respecting the interpretation of the Vedic text which may now be considered as at an end. The Vedas have reached us imbedded in a dense mass of native erudition of various dates, of which Sāyana’s commentary on the Rig-Veda (fourteenth century A.D.) may serve as a sample. Some scholars, amongst whom was the late Professor Goldstücker, believed that these commentaries represented a genuine ancient tradition, in the face of which modern scholarship could only listen and believe. It may now, however, be regarded as established that an uninterrupted tradition respecting the interpretation of the Veda has not existed in India, and therefore cannot have been preserved by these commentators, and every one who studies the Veda at the present day takes the liberty of pronouncing judgment on the views of these Indian philologists as he would do in the case of a modern student in Europe or America. This state of the case is set forth by Whitney with clear penetration that cuts off from the adversary all hope of retreat. The fifth paper, “Müller’s Rig-Veda Translation,” is of more special interest. It is followed by an elaborate essay on the Avesta, in which the notices of the literature of the subject are particularly welcome.

Two reviews of Prof. Hewitt Key and Herr Oppert mark the transition to works of a more general character. It was no very difficult task for Professor Whitney to criticize the strange and isolated views of the former and the pretentiousness of the latter of these writers, and he does so in a very amusing fashion. The eighth article, “Müller’s Lectures on Language,” belongs to the domain of serious scientific controversy. Whitney does justice to the strong points of the book, and praises especially the admirable skill shown in the choice of examples, but he speaks with severity of its weak sides. He notices as a defect the want of plan in the whole, the carelessness of many assertions, and he goes so far as to call one deduction “simply and solely nonsense.” One is tempted to ask whether such strong expressions were necessary : whether these strictures might not have been worded more politely ? But Whitney has evidently proportioned the violence of his attack to the resistance which he expected it to encounter, and was persuaded that Max Müller’s popularity in England would offer a very strong resistance to any hostile criticism. It seems, in fact, that in England Max Müller’s lectures have been in many ways regarded in a false light. When we read in a letter of his to the Hungarian minister v. Trefort, written on the 18th of May, 1873, and published in the Pesth *Lloyd* : “My own lectures on philology have become a school-book in many places (in England),” there is no room for any feeling but astonishment. In point of fact there is scarcely a book less fitted for school use than Müller’s lectures. A school-book ought to contain those results of research upon which the majority of those engaged in the special study are agreed, and should refrain as much as possible from the expression of personal opinions which have yet to be proved ; Max Müller, on the contrary, in his lectures popularizes not the scientific conclusions generally recognised, but his own personal views. These are at variance on several points with those of his fellow students ; some of his assertions respecting, for instance, the so-called Turanian languages or Grimm’s law, have been shown to be unten-

able ; while upon other points, e.g. mythological interpretations, it is scarcely probable that opinion will ever be united. The English public ought to feel itself indebted to Professor Whitney for calling its attention to this easily recognizable character of the lectures. Of the remaining papers it may suffice to notice two which are also of a polemical character, directed one against Schleicher’s, the other against Steinthal’s theory of language. I entirely concur in the judgment passed upon Schleicher. As to the criticism of Steinthal, just because I think more highly of the general value of his work than Whitney does, I am bound to admit that Whitney seems to me to have triumphantly refuted the latest statement of his views on the origin of language. But then I also believe that this refutation is addressed to the weakest of all Steinthal’s writings. He always has a slight mystical metaphysical bias, and this is very apparent in the passages discussed by Whitney, who conceives that the profit to be derived by philologists from either Lazarus or Steinthal is extremely small. My own experience has been different, and I must confess that in the course of syntactical inquiries I have often derived very considerable assistance from the views of these writers.

It will be seen from what precedes that Professor Whitney’s essays are both valuable and suggestive. It would be well if his lectures on the science of language were more studied in Europe, as they doubtless would be if the author were to provide for their publication in a convenient abridgment.

B. DELBRÜCK.

Palladius on Husbandrie ; edited from the Unique MS. of about 1420 A.D. in Colchester Castle. By the Rev. Barton Lodge, M.A. Part I. (Early English Text Society.) Triebner and Co. 1872.

As only the first part of this publication has yet appeared, we find no editor’s preface to guide us, since that is of course reserved for the present till the work shall be completed. We are therefore left to our own unaided contemplation of the portion of the text before us. It is, however, not difficult to form a tolerably correct estimate of the work.

Smith’s *Classical Dictionary* gives a sufficient account of “Palladius Rutilius Taurus Æmilianus, the author of a treatise *De Re Rustica*, in the form of a Farmer’s Calendar, the various operations connected with agriculture and a rural life being arranged in regular order according to the seasons in which they ought to be performed. It is comprised in fourteen books : the first is introductory ; the twelve following contain the duties of the twelve months in succession, commencing with January ; the last is a poem, in eighty-five elegiac couplets, upon the art of grafting.” The date assigned to the work is the fourth century, though there is some uncertainty on this point.

The treatise of Palladius seems to have been very popular in the Middle Ages ; one mark of its popularity is the English translation now for the first time edited. Nothing is known as yet about the translator, unless the editor has found some note of him. Something is however supplied by internal evidence, as we shall see presently. The portion as yet published contains the translation of the first book, which is introductory, and of the next ten books, i.e. from January to October ; from which it should seem that there are but three books more to come.

It is clear that the editor has taken very great pains with the work. The marginal notes, containing a summary of the text, are very full, and sometimes give an almost complete modern English rendering of the old English verse. Nothing can be more convenient than his system of adding, at the foot of the page, the original Latin words corresponding to the more obscure English words and phrases. This saves a great deal of tiresome reference, and at the same

time brings out the sense of the English very clearly—more clearly indeed than any explanation can do. Such perpetual reference to the original must have been of great assistance to himself, as it certainly is to his readers. The principle is perhaps obvious enough; but obvious principles are by no means always adopted by editors.

Observing these instances of care, it becomes the more astonishing to find that the *exact* forms of the original manuscript do not appear to have been followed. We miss the italics denoting marks of abbreviation, but most of all we miss the use of the letters *u* and *v* in their proper places. Just as in Mr. Arnold's edition of Wyclif's works, and just as in a great many other editions of old English texts, we find the MS. *v* systematically turned into *u*, and the *u* into *v*. Why is this? It may have been all very well when the study of old English was in its infancy, and when critical accuracy was unknown; but why should this pernicious system, which the Early English Text Society has done so much to put down, be any longer pursued? We are not mere infants, unable to read unless the texts are manipulated beforehand so as to make them look easier; we really are getting beyond that stage now, or we ought to be. Experience shows what comes of it; when Mr. Arnold met with the word *cornes* (which is but the old plural of *corn*) in his manuscript, he turned it into *corves*; so here the old English *chenes* (for *chinks*) is correctly printed *chenes* at p. 17, but at p. 218 the singular form *chene* (a *chink*) is mistaken for *cheue*, and then printed as *cheve*! The misprint *cheue* would not have mattered, as it would easily have been set right; but a word like *cheve* is one which only the initiated can understand, and must be a terrible puzzle to a beginner. Of course, as we have not access to the MS., *cheve* may be the scribe's error, and if so there is no more to be said; but it is very suspicious. If the MS. is really written *exactly* as it is printed, it is hard to believe that the assigned date (A.D. 1420) can possibly be right within half a century. There is something wrong somewhere.

The criticism of editorial work is an ungracious task; but we cannot shut our eyes to the fact that the editor seems to have made mistakes which are the result of mere inexperience. Thus at p. 43 we have—

"Palladii primus liber explicit : assit ut unus
Alpha vocatus et Ω det mihi Christus homo."

Now any one accustomed to the old Leonine verse misses the rime in the first line; the last word should, of course, be *imus*, which has the advantage of making sense also. Besides which, *unus* would have been written *vnus*, with initial *v*. The author prays that Christ, who is Alpha and Omega, will grant him to finish the *last* book as he has now finished the *first*. Again, in st. 157, p. 40, should not *feetes* be *settes*, as in the stanza following? So at p. 49 we have *wredthed* for *wrecched*, where the MS. no doubt looks like *ct*; but as *cc* is so frequently written like *ct* there was no need to print it so. At p. 114 it is suggested that *wordes* is an error for *worldes*; yet it is no error, but merely another spelling; see l. 32 of Dr. Morris's *Genesis and Exodus*, and *werd* for *world* five times in *Havelok the Dane*. The words *cree* for *eree* on p. 79, and *brynnnyg* for *brynnnyng* on p. 127, are mere printer's errors, such as cannot always be avoided. The emendation *Floures* for *Floure* on p. 148 is wrong; so is the insertion of *and* in the fourth line on p. 213; and so is the insertion of a comma after *wonder* on p. 7, l. 163, as may be seen by referring to any glossary to Chaucer. And lastly, to make an end of fault-finding, we may observe that a *hopper* is not a small square field, as explained on p. 180; though perhaps this is a mere misprint for something else, since the note says—"Clothe thy hopper (small square field) with a

hyæna's skin." The original text says—"Thyne hopre cloth hienes skynne," which means—"Let thy hopper-cloth be a hyæna's skin;" where *hopper-cloth* is a compound substantive, meaning the cloth laid at the bottom of a *hopper* or seed-basket.

On the whole, however, the edition is a good one, and a great gain; we are only pointing out some respects in which it might have been improved.

It further appears that the MS. itself, though fairly well spelt on the whole, is not always correct; there are several places where editorial corrections might have been made to the great improvement of the metre. Thus on p. 31 *shouelle* (*shouelle* in MS.?) should be *shoule*, in order to rime with *oule*. It is remarkable that the same error occurs in most editions of the nursery tale of Cock Robin. The correct reading is clearly, as noted in Halliwell—

"I, said the Owl,
With my spade and *shoul*."

The scribe, like many others, sometimes writes *e* for *o*, as *dese* for *close* (p. 27); and, on the contrary, *o* for *e*, as *holdou* for *holden* (p. 123); *loith* for *leith*, i.e. *layeth* (p. 25). Other errors are *Ereither* (p. 32) or *Er either* (p. 186) instead of *Here either*, i.e. either of them; also *oons* for *oones* (pp. 114, 147); *thens* for *thennes* (p. 30); *een* for *eyen* (pp. 129, 133); *colours* for *coloures* (p. 133); mistakes which entirely cripple the rhythm, as they subtract a syllable from the lines wherein they occur. The necessity of such emendations is especially conspicuous at p. 147, where *oones*, a dissyllable, but miswritten *ous*, is made to rime with *oon is*, two separate words.

Putting aside these and a few similar drawbacks, let us proceed to examine the work as a whole. There are several things which contribute to give it a high value, to some of which we now draw attention. The nature of the book is such that it necessarily contains a vast number of good examples of agricultural words, which are not always easy to find and are yet of much interest to the linguist; whilst it also contains a great deal of information on agricultural subjects, mixed up with several instances of curious folklore and old superstitions, applicable in the first place no doubt to Italy, but not without their occasional counterpart in old England. On many technical points its authority will always be worth consulting. But we more especially wish to draw attention here to one peculiarity, which is perhaps almost sufficient to assign to it an interest of the highest character, and this is the excellent commentary which it will furnish, if duly examined, upon the works of our famous Geoffrey Chaucer. Probably no more instructive commentary upon Chaucer's rhythm has ever appeared. It has hitherto been Chaucer's misfortune that the works of his imitators Occleve and Lydgate are such as to give us next to no help. They did not much succeed in catching their master's rhythm, and their lines frequently halt past all critical mending. This circumstance has cast a suspicion upon our great poet's rhythms; it has made them appear, as it were, too artificial; it has prevented the critics who uphold the smoothness of the flow of his lines from making as many converts as they might fairly hope to make. Here however at last, and it is none too soon, we are able to point to a long poem, *not* written by Chaucer, the author of which really had an ear, and had obtained a very creditable mastery over all the intricacies of the rhythm which he adopted. There can be little doubt that the author had thoroughly appreciated and mastered the metre of Chaucer's *Troilus and Crescide*, the "Man of Lawes Tale," and the "Clerkes Tale." We should infer, moreover, that he wrote no later than A.D. 1400, before Occleve produced his translation of *De Regimine Principum*, and whilst the true ring of the beautiful seven-line stanza was still well perceived. There are a few

Northern words scattered through the poem, such as *inwith* for *within*, *louyng* in the sense of *praise* (p. 157), *umbigoon* for *surrounded*, and *veer* for the *spring of the year* (as in Barbour), which at once show that the translator of Palladius was not Chaucer, but some one who had at an early period of life lived in the North of England. Yet he must have come South afterwards, and completely mastered the Midland dialect, rhythm and all, so as to have been enabled to reproduce the language of Chaucer in all essential points. Hence the careful reader will find probably a great number of Chaucerian words, since a cursory examination shows us the words *nyghtertale* (p. 33), *ponly gray* (p. 133), *handbrede* (p. 80—Tyrwhitt has *hondbrede*), *arme-greet* (p. 75—see the "Knights Tale"), *been* as the plural of *bee*, *fleen* as that of *flea*, and so on. The expression *His eyen steepe* in Chaucer's prologue has reference to bright eyes; so also in the translator of Palladius, p. 133, we are told that horses ought to have

Thaire eres shorte and sharpe, thaire e[y]en steepe[e];
where we dissent from Mr. Lodge's explanation of "deep eyes," and prefer the opinion of Dr. Morris. Again, as regards the metre, we know that Chaucer makes the final *-es* in the plural of substantives a distinct syllable, so that *swordes*, for example, is a dissyllable, as in

The brighte swordes wenten and fro.

In support of this we adduce from the translator of Palladius the extraordinary lines

The chenës, holës, pottës, polës mendë (p. 17);
Let rakës, crookës, adses, and bicornës (p. 42).

And, of course, other examples are to be found by the hundred throughout the work.

Again, Chaucer often contracts two words into one in certain cases, as *tabide* for *to abide*. So also the translator of Palladius:—

Yit is the chalk or claylonde for to eschew (p. 29);
Ne wicked worme this catell for to offende (p. 39);

where the metre requires *teschew*, and *toffende*.

So also in other matters. Here, for example, the *e* in the middle of a word counts for a syllable.

To greece her vynë-knyf for dyveres derës (p. 31);
The moldëwarp the Grekës thus pursue (p. 34);
Relaxed bereth vynëyerdës gretë (p. 49);
For moldëwarpës cattës is to kepë (p. 109).

Here, again, exactly in Chaucer's manner, we find such rimes as *arayës, play is* (p. 27); *marës, ware is* (p. 28); *seedes, nede is* (p. 29); with probably half a hundred more of the same kind. Examples of the final *e* are not very common, for the simple reason that the poet often shows great art in contriving elisions; still the following may be cited.

Yet wenë men that they wol not do soo (p. 39);
The balkë, that thai calle unerëd lande (p. 44);
The leendës broodë, playnë bak and stregh (p. 129);
Howe vynës yonge as oldë shal appere (p. 199).

Probably a more careful search would reveal a hundred examples at least; though of course it must be borne in mind that the scribe's spelling is no particular guide. Thus he leaves out the final *e* in the plural adjective *greete*, and wrongly writes

With greet cleen, and tailës longe and wide (p. 129)—

which is mere discord; whilst he writes *alle* for *al*, *oute* for *out*, and *atte* for *at* in one and the same line, viz.—

Yf alle the swarme oute atte the yatës goo (l. 39).

But these things will not much trouble the student who is aware that the final *e*, as rightly pronounced, is entirely independent of the final *e* as occasionally miswritten.

In like manner on p. 38 we find *gutters* as a rime to *fere is*; it is clearly miswritten for *gutteris*, a trisyllable,

Another peculiarity of Chaucer is that he rimes words spelt exactly alike, if their significations be not the same; thus, in l. 17 of his prologue, *seekë* (the verb) rimes to *seekë* (plural adjective). Similar examples in our new author abound; thus at p. 39 *stonde* (substantive) is paired off with the verb *stonde*, to stand.

Again, a final *e* is sometimes saved from elision in Chaucer by a cæsura, as in the "Nonne Prestes Tale"—

Of cátapúcé, ór of gáytre béryis—

unless (as some prefer) the cæsura be held to count for a syllable, and the reading be *catapus*, followed by a pause; however, we find in our new author a not dissimilar instance, at p. 39—

So thát thou clémë, ánd this lítel cóste.

But so interesting a subject forms a theme rather for a long essay than for a short notice. We must therefore conclude by thanking the editor very sincerely for the great pains he has evidently bestowed upon what will probably be found hereafter to be a work of no inconsiderable importance. The few blemishes we have pointed out are not such as to detract much from its value, though we do hope we may in future be considered as sufficiently grown-up to be able to read old English, even though every *u* and *v* of the original MS. be retained unaltered.

WALTER W. SKEAT.

Titl Livii Historiarum Romanarum libri qui supersunt—iterum ediderunt Io. N. Madvigius et Io. L. Ussingius. Hauniae: F. Hegel. 1873.

FOR this second edition of the first five books of Livy Madvig has been able to make use of the Veronese palimpsest, edited by Mommsen in 1868, which contains portions of books iii. to vi. Hitherto the text of the first decade has rested on the authority of a MS. corrected in the fourth century for the Symmachi by two copyists called Nicomachus. This archetype is lost, but is represented to us by (1) the Medicean MS. of the eleventh century, and a MS. once at Worms and then used by Rhenanus, (2) a Paris—Colbertine MS. of the tenth century, (3) a Harleian MS. and Drakenborch's Leyden MS.—these only holding the third rank. Madvig has calculated that the original MS. must have contained 144 letters in each column, and this is the number of letters between words which have been written twice by mistake in vi. 42, § 12-13, *causae libenter facturos*, the eye of the copyist having glanced for a moment at the wrong column. This is one of a series of delicate calculations and tests which Madvig has used for the external criticism of the text. At the beginning of his *Adversaria Critica* he has given a most valuable summary of the *causes of error* in copying manuscripts, a knowledge of which is of great service in emending the text. The other means of emendation consists in the internal evidence of style, matter, usage, antithesis, and so on, and it is here that Madvig's great strength lies. Sometimes the two lines of argument, external and internal, coincide; and sometimes a difficulty in the one leads to closer investigation of the other, and fresh evidence is not unfrequently thus obtained. Questions of historical or critical evidence are too often treated as if the object were to convict a criminal, and it seems to be required that the evidence should be such as a jury would accept as legally sufficient. Of course the object is wholly different in literary matters, the balance of probabilities being sufficient for our purpose. The Veronese palimpsest, discovered by Mai, is independent of the one MS. on which we have hitherto depended, and hence its value. In the ninth century some one partially cleaned away the old writing, and wrote Pope Gregory's "Moralia on Job" on the parchment thus obtained; writing materials had become very

scarce, and the supply of papyrus from the East having failed, parchment had become all the more valuable. Under the Moralia, however, we can still read leaves of Virgil, Livy, a Latin translation of Euclid, and some philosophical treatises. The text of Livy in this palimpsest was copied from a different MS. to that which the Nicomachi used about the same time, and we know that Cassiodorus in the sixth century had a text of Livy independent of both the Nicomachean and the Veronese. Unfortunately our new MS. is very badly copied, and the Nicomachean recension is much superior to it. It is difficult to imagine (says Madvig) how any one could have written *consulib. tantissimo* for *constantissimo*, iii., 35, 9, or *qui fuit* for *quievit*, iii., 51, 7, or made *aut alio loco* out of *Aio Locutio*, v. 50, 5. Still it has preserved the right text in some passages, and confirmed it in others. Thus in iv. 25, 4 the present text has *famem cultoribus agrorum timentes*, where something has been evidently omitted; the new text reads *Famem quoque ex pestilentia, morbo implicitis cultoribus agrorum, timentes*. In v. 53, 1 we read in the editions, *Sed res ipsa cogit vastam incendiis ruinisque relinquere urbem*, where the speaker supposes an objection to what he has been saying. Such an objection however is usually prefaced by *at*, not by *sed*; and the Veronese MS. prefixes a whole clause, *At enim apparet quidem [pollui omnia nec ullis piaculis expiari posse; sed, &c.* In iv. 26, 12 we gain one new word, *Dilectus* simul edicetur et iustitium, where there has always been a difficulty about the construction. On the other hand, in iii. 56, 12 tollendae appellationis causa, the last word is rightly omitted by the palimpsest. In v. 41, 3, M. Fabio pontifice maximo, the new MS. gives us the ancient and rare name M. Folio, and we can now see the meaning of the Medicean MS. having *M. filio*. The Folsian or Folian family so rarely occurs that Folio was easily corrupted into Fabio. In v. 7, 13 the new MS. has *tum primum equis suis merere equites caeperunt*, thus confirming a conjecture of previous editors, where also a trace of the right reading survives in the Medicean. But in iii. 65, 1, where Mommsen out of the few letters legible in the Veronese constructs the reading *Novi tr. pl. C. M. P. Aricios N. et L. Aternios. cooptavere*, and thinks the Nicomachean text bears traces of an historical and not a mere grammatical interpolation, Madvig with good reason dissents from him. These instances Madvig selects as being the most striking, but in many minor points the value of our new and independent witness is evident. Sometimes the coincidence in error shows that the text was corrupted before the fourth century. In fact in the instance given above, v. 41, 3, Plutarch must have read Fabio, for he says (Camill. 21) *ἐξηγουμένον Φαβίου τοῦ ἀρχιερέως*. Not a few of Madvig's previous emendations receive confirmation from the Veronese readings, e.g. iii. 62, 3, *id consilii animique habiturus sum quod vos mihi feceritis*, where Weissenborn follows the Medicean reading, *quod vos milites geritis*. Madvig's text is certainly by far the most satisfactory text of Livy that we possess, and what he has done for the last decade is something wonderful. It is curious that our MS. for the fifth decade is of the seventh century (at Vienna), and that for the third decade of the eighth (the Puteanus at Paris), whereas hitherto we have had nothing for the first decade before the tenth century. The new MS. is probably of the fourth, and certainly could not have been written before Diocletian, since *consul* and *consules* are represented by *CONS* and *CONSS*, whereas before the age of that Emperor *COS* is the regular contraction. We may add a remark on one passage where Madvig has altered his note, but where the difficulty still remains. In iii. 41, 8 the Decemvirs decide that Appius shall stay at home to manage the city, and Fabius shall take command of the

army. The Decemvirs' reason for this selection is thus given: "Appii violentiam aptiorem rati ad comprimendos urbanos motus; in Fabio minus in bono constans quam navum in malitia ingenium esse." The antithesis seems to require that Appius was kept at home because of his firmness in keeping down civil troubles, and Fabius sent to the frontier because his vigour in command of an army was greater than his civil courage in upholding the good cause (of the Decemvirs' party). If this is so, should we not read *militia*? *Naviter pugnatum, naviter bellum gerere*, and similar phrases, are of constant occurrence in Livy, while *malitia* does not seem to be a Livian word. There is a curiously parallel passage in x. 22, 6, where another Appius is contrasted for his civilian powers with Fabius and Decius, "*viros natos militiae*." In his first edition Madvig inclined to omit *in bono*; now he thinks Livy has confused the different views in his mode of statement, but does not suggest any emendation. What "*constans*" means is clear from iii. 46, 4, *neque decemviro constantiam defore*. In the next paragraph Livy gives his own view of Fabius, but the word "*rati*" shows that in the first sentence he is only stating the Decemvirs' view. "Once," says Livy, he was equally excellent at home and abroad—*domi militiaeque*; now he had assimilated himself to Appius as far as he could, i.e. but was not quite firm enough for the Decemvirs to entrust him with the control of the city.

C. W. BOASE.

Ferrall and Repp's Danish-Norse-English Dictionary. [*F. og R.'s dansk-norsk-engelsk Ordbog. Fjerde forøgede Udgave ved A. Larsen.*] Gyldendal: Copenhagen. 1873.

HERE for the first time English students are presented with a classified list of Norse words and idioms. That is the first peculiarity of Mr. Larsen's edition of Ferrall and Repp. Hitherto that useful and time-honoured work has only professed to be a Danish-English Dictionary. It is an immense advantage, this addition alone; the enormous strides taken by the Norwegian literature, the great importance of the works of Norse writers in our day, and the peculiar northern individuality of those works, unite to make a Norwegian section in the one great Danish-English Dictionary an absolute necessity. Norse words here are plainly marked with *; and a less obvious, but still valuable contribution to the completeness of the work is made in the selection of exclusively Danish idioms, marked with †. The style of printing is far superior to that of the previous editions; the individual articles are far more modern and copious, and the spelling is corrected so as to be as much as possible in accordance with the latest improvements in orthography.

A Danish dictionary in the present day cannot fail to be a very empirical thing at best. Probably no language in Europe has an orthography so thoroughly unsettled as the Dano-Norwegian has. At first sight it seems as though the literature were sweltering in a chaos of bad spelling, without aim or hope. No two authors agree in form; a page of Ibsen differs from a page of Björnson and both from one of Paludan-Müller. Even the newspapers preserve their independence; *Fædrelandet* is not at all like *Berlingske*, and *Dagbladet* can be instantly distinguished from *Morgenbladet*. One's friends, with perfect indifference, address one as "Kjære Herr—," or as "Kære herr—," and date from Kristiania or Christiania, from Kjöbenhavn or Köbenhavn, as their own judgment dictates—a condition of things in the highest degree anomalous and almost incredible!

A point or two of firm land gives hope of a settled orthography in the future. Long ago Rask suggested that the spelling of Danish words should be modified in a phonetic

direction, and should more and more assimilate itself to the kindred Swedish spelling, which has already become fixed. The influential and learned, but somewhat narrow-minded Molbech opposed Rask with vigour, and the movement made little way. It was not till 1869 that a determined effort was again made to settle the floating orthography into a distinct mould, approximating the Swedish as closely as possible. For this purpose a meeting was held at Stockholm in that year, attended by eminent scholars from Copenhagen, Lund, Stockholm, Upsala, and Christiania, for the purpose of working together to this end. Among the delegates were Professor Malmström, the linguist J. Lökke, Ibsen the poet, and the antiquarian Svend Grundtvig. The rules laid down by that meeting form the basis of a reformed orthography, and it is interesting to notice that the suggestions of those scholars are being rapidly adopted.

A remarkable instance of the progress made in this direction is afforded by the book now under review. We have before us, side by side with the new work, an old edition of the same dictionary brought out by Mariboe in 1861. It may be interesting to point out some of the changes made. In the first place the letter Q is dropped, and all words which might be looked for under it are found under K. At the same time the letter C has almost disappeared, being merged in all possible cases into K. We notice that such words as *China*, *Chor*, retain the C. Some writers are ruthless in their destruction of this letter; Ibsen (in *Kjærlighedens Komedie*) writes Kinesemur (for Chinese-muur).

The last quoted word brings us to another innovation. This new dictionary rejects double vowels when the second is mute. *Huus* in Mariboe is *Hus* in Larsen. Of like significance is what is called the supporting *e*, a dumb letter following a vowel, as in *dœ*; the new dictionary, in accordance with the suggestion of the Stockholm meeting, spells that verb *dö*. An objection occurs to us here on the ground of confusion of meaning. In the present tense, *han döer* becomes *han dör* (he dies), which exactly corresponds to the noun *Dör* (door), especially if we drop the noun-capital after the extreme fashion of Ibsen and others.

The mute *j* is dropped in the new edition, a change which greatly helps to approximate the language to Swedish in appearance. *Gjøre* becomes *göra* (Swed. *göra*). Among minor alterations may be noticed the universal adoption of *öj* and *ej* instead of *öi* and *ei*. For example *Flöiten* in Mariboe is *Flöjten* in Larsen. All foreign words remain in a terrible state of confusion, but some phonetic changes of great importance are made. The old-fashioned *Capitaine* is hardly to be recognized under its new dress of *Kaptejn*. Among words of foreign extraction we miss several in constant use. We fail to discover *Ekko*, for instance, nor is it given under *Echo*, yet surely it is quite as much in use as the old-fashioned *Genlyd*.

In all the above-mentioned reforms Hr. Larsen has followed the suggestions of the Stockholm meeting. He has not been bold enough, however, to adopt other modifications of no less importance. It is well known that the use of Gothic letters is almost entirely abandoned in Sweden, and by no means universal in Denmark. Two prominent Copenhagen newspapers, *Fædrelandet* and *Illustreret Tidende*, have long been printed in Latin type, and so are many of the best books. It was desired at Stockholm that the Dano-Norwegian language should wholly drop the Gothic letters, but Larsen has continued their use. It was further proposed to drop the use of capital letters for nouns, which according to Rask was not general in Denmark till about 1700, and which is unknown in Swedish. The poet Ibsen alone has been consistent in carrying out this suggestion. It was

further proposed that where *æ* was of no more value than *e*, *e* should be substituted. Ibsen spells *Præst*, *præst*, but he is again alone in this practice.

A more important suggestion was that the sign *ä*, having the power of a broad *o* in English, should be adopted from the Swedish in exchange for the *aa* now in use. It appears that the Danish language has repeatedly flirted with the *ä*. Rydqvist, the Swedish philologist, believes that it was originally borrowed by Sweden from old Danish MSS. This legendary origin has given the sign a charm in the eyes of the Pan-Scandinavian party, and the use of it is almost a shibboleth with them. Larsen rejects it. He also retains the mute *d* and *h*, and the letter *x*. The mute final *d* no reformer, not even Ibsen, has had the courage to drop, though the Stockholm meeting, in its unflinching rectitude, recommended this also.

Mr. Larsen has had the assistance of Mr. Jacob Lökke, the well-known Norwegian linguist, in his labour of revision, and this adds no little to our confidence in the accuracy of the details, for Mr. Lökke is one of the highest authorities on all matters connected with Scandinavian philology. We heartily recommend this new dictionary to the attention of scholars and travellers.

EDMUND W. GOSSE.

Correspondence.

To the Editor of the ACADEMY.

Berlin, 27th July, 1873.

SIR,—In a letter dated Bombay, 19th April, and published in your number of June 14th (No. 74, p. 237), Professor R. G. Bhandarkar complains of my inattention to one of his statements with regard to the age of *Putanjali*, as manifested in my letter of the 25th February, published in your number of March 15th (No. 68, p. 118). I beg first to call the attention of Mr. Bhandarkar (as well as that of your readers) to the simple fact that I could not possibly advert at that time to the reiterated statement of his opinions as contained in the *Indian Antiquary* of February last, p. 59; for the February number of that valuable periodical did not reach Berlin before the 3rd March. If, further, I did not pay the attention due in Mr. Bhandarkar's eyes to the first statement of his views (in the *Indian Antiquary*, October, 1872, p. 300) it is certainly not because I "did not see" that those two passages of the *Mahābhāṣya*, of which he there treats, "are distinct" ("still Prof. Weber does not see that they are distinct passages. I am at a loss to conceive how it could be so"), but merely because I could not at all attach to that passage treating on the "sacrificing for Pushpamitra" the same value as he does. On the very day before he wrote to you, the 18th April, I addressed a long letter on the subject to the editor of the *Indian Antiquary*, which will probably soon be published in its columns, and in which I have treated the whole question anew with direct reference to that singular passage, answering all the different proposals made by Mr. Bhandarkar on it and on similar points. In referring to it such of your readers as may be interested in the subject, I beg to call their attention also before-hand to a somewhat extensive dissertation on the *Mahābhāṣya* itself, which is now in the course of printing in vol. xiii. of my *Indische Studien*, and in the introduction of which I have surveyed again, even more fully, the present state of the researches on the age of that work.

As I stated at the end of my former letter to you, on Professor Bühler's authority, that "the Jainas spell the name of the Indian king in question in their Māgadhi-texts *Pupphamitta*, which gives Pushpamitra as the right form," I would add now, that according to a later statement from the same source, received May the 17th, it is but Merutunga in his Vicāraṇeni who reads thus, whereas the text itself, on which his commentary runs, has *Pāsamitta*, and this is the reading also of four other texts. The form *Pushyamitra* regains, therefore, its former plausibility; as a *Nāḥshatra*-name it has indeed more appearance of being the true form of the name, than the rather insignificant form

Pushpa-mitra. Moreover, the predecessor of the king also is called by the Buddhists *Pushyadharman*.
A. WEBER.

Notes and Intelligence.

An International Congress of Orientalists will hold its sittings in the great amphitheatre of the Sorbonne at Paris from the 1st till the 9th of September next. Its purpose is to create personal relations among men interested in Oriental affairs. The following subjects have been set down for discussion:—1. What portions of Japanese literature would it be most useful to translate at this moment, and what are the philological resources for undertaking the publication? 2. Would it not be useful to establish a uniform orthography for the transcription in Europe of all Japanese texts? 3. What are the documents of a nature to facilitate the understanding of the special scientific, literary, and industrial works of the Japanese? 4. What is the nature of the actual movement of Japanese civilization, and of its relations with European civilization? 5. What are the characters of Japanese art at the different epochs, and what method is to be followed for studying them? 6. In what measure has actual Japanese literature, strongly saturated as it is with European ideas, interest for Europe? and may it be thought that the progress realized by the Japanese savants will be of a nature to contribute to the scientific movement of the Eastern nations? The subscription for becoming a member of the Congress is fixed at twelve francs. The offices of the Congress are 49, Rue de Rennes, Paris.—*Pall Mall Gazette*.

We learn that Prof. Summers, who has engaged himself to the Educational Board of Japan, and is about to take up his residence in that country, will continue to edit the *Phoenix*, which will for the future be published at Yokohama. The next number will not be issued before January, 1874.

New Publications.

- ANDREE, R. Das Sprachgebiet der Lausitzer Wenden vom 16. Jahrh. bis zur Gegenwart. In Comm. Leipzig: Brockhaus.
- ASCOLI, G. J. Archivio glottologico italiano. Volume secondo. Puntata Prima. Turin: Loescher.
- BOUCHERIE, A. Fragment d'une anthologie picarde (xiii^e siècle). Paris: Franck.
- BURNELL, A. C. The Sāmavidhānabrāhmaṇa. (being the third Brāhmaṇa) of the Sāma Vēda. Vol. I. Trübner.
- CHOSSAT, A. DE. Essai d'une classification du syllabaire assyrien. Paris: Maisonneuve.
- CORPUS inscriptionum atticarum. Vol. I. Inscriptiones Euclidis anno vetustiores, ed. A. Kirchhoff. Berlin: Reimer.
- CORPUS inscriptionum latinarum. Vol. III. Inscriptiones Asiae provinciarum Europae Graecarum, Illyrici, Latinae. Ed. Th. Mommsen. Berlin: Reimer.
- ERHARDT. Grammatikalien zum Verständniß d. Nibelungen-Liedes. 2 Abth. Syntaktisches. Tübingen: Fues.
- FACCIOLATI, J., A. FORCELLINI, et T. FURLANETTI. Lexicon totius latinitatis, cura opera et studio lucubratum nunc demum juxta opera R. Klotz, G. Freund, L. Döderlein aliorumque recentiorum auctius emendatius melioremque in formam redactum curante doctore Fr. Corradini. Tomus III. Fasc 3. Patavii: typis Seminarii.
- FORCELLINI, A. Totius latinitatis lexicon, adjecto insuper altera quasi parte onomastico totius latinitatis, cura et studio V. de-Vit. Distr. 48. Leipzig: Brockhaus.
- HINTNER, V. Beiträge zur Tirolischen Dialektforschung. Wien: Beck.
- JOLLY, Dr. J. Geschichte der Infinitivs im Indogermanischen. München: Ackermann.
- MEYER, C. Die Nibelungensage. Basel: Schneider.
- NODAL, Dr. J. F. Elementos de Gramática Quichua, ó Idioma de los Yncas. Trübner.
- PAUTHIER, G. Le Livre classique des trois caractères de Wang Pêh-Héou en chinois et en français. Paris: Challamel aîné.
- RÖSSLER, C. Th. Dionysii Halicarnassensis scriptorum rhetoricorum fragmenta. Göttingen: Deuerlich.
- TEGNER, E. Frithiofs Saga. Schwedischer Urtext. Hrsg. von G. von Leinburg. Mit e. Wörterb. u. kurzgefasster Grammatik v. C. Silberstein. Frankfurt a. M.: Winter.
- ZEITSCHRIFT für vergleichende Sprachforschung auf dem Gebiete d. Deutschen, Griechischen, u. Lateinischen. Hrsg. v. A. Kuhn. 22 Bd. 1 Hft. Berlin: Dümmler.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 78.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Monday, September 1, and Advertisements should be sent in by August 28.

Open Scholarships without Examination.

The Hibbert Trustees are prepared to grant at their meeting in December next One or more Scholarships of £200 per annum each, for two years, to Graduates of any University in Great Britain and Ireland, between the ages of twenty-one and twenty-eight, to enable them to study Theology and Mental and Moral Philosophy at Universities in Germany, Holland, or Switzerland (or elsewhere), subject to the approval of the Trustees. Full particulars may be obtained of the Secretary, to whom applications for Scholarships must be forwarded before October 1, 1873.

A. H. PAGET, Secretary.

University Hall, Gordon Square, W.C.

British Association for the Advancement of SCIENCE,

22, Albemarle-street, London, W.

The NEXT ANNUAL GENERAL MEETING will be held at BRADFORD, commencing on WEDNESDAY, September 17.

President Designate—Professor A. W. WILLIAMSON, Ph.D., F.R.S., F.C.S., in the place of J. P. JOULE, D.C.L., LL.D., F.R.S., who has resigned the Presidency in consequence of ill-health.

NOTICE to CONTRIBUTORS of MEMOIRS.—Authors are reminded that, under an arrangement dating from 1871, the acceptance of Memoirs, and the days on which they are to be read, are now, as far as possible, determined by Organizing Committees for the several Sections before the beginning of the Meeting. It has therefore become necessary, in order to give an opportunity to the Committees of doing justice to the several communications, that each Author should prepare an Abstract of his Memoir, of a length suitable for insertion in the published Transactions of the Association, and that he should send it, together with the Original Memoir, by book-post, on or before September 1, addressed thus—"General Secretaries, British Association, 22, Albemarle-street, London, W. For Section....." If it should be inconvenient to the Author that his Paper should be read on any particular day, he is requested to send information thereof to the Secretaries in a separate note.

Information about local arrangements may be obtained by application to the Local Secretaries, Bradford.

G. GRIFFITH, M.A., Assistant General Secretary, Harrow.

Junior Assistant for Photographic and Spectroscopic Observations in the Royal Observatory, Greenwich.

An open competition for one situation will be held in London, on Tuesday, September 30th, and following days.

A preliminary examination will be held in London, Edinburgh, and Dublin, on Tuesday, September 16th.

Limits of age, 18 and 25. Application for the regulations and the necessary form should be made at once to the Secretary, Civil Service Commission, Cannon Row, London, S.W.

Just Published, Crown 8vo, cloth, price 2s. 6d.

The Harveian Oration, 1873, by George Rolleston, M.D., F.R.S., Linacre Professor of Anatomy and Physiology, and Fellow of Merton College in the University of Oxford.

London: MACMILLAN AND CO.

THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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No. 79.]

REGISTERED FOR

MONDAY, SEPTEMBER 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Chapman's Dramatic Works. 3 vols. London: John Pearson, York Street, Covent Garden. 1873.

It may well be questioned why Chapman's plays have only now been collected and published in a complete form for the first time. His fame as the translator of Homer, and the praises bestowed upon him by Hazlitt and Lamb, would have justified a far earlier edition in the half century which has reprinted the plays of Middleton and Lilly, Greene and Peele. The reason of this tardy justice done to Chapman may perhaps be found in his own work. Of all the Elizabethan dramatists he is the least attractive at first sight. Though some of his comedies are well conceived and carried through, yet as a tragedian he was unable to construct a plot or to work out the plan which he had laid down with lucidity. In his management of motives, that all important portion of the playwright's art, he was singularly clumsy, and his most highly studied dramas have, broadly speaking, no action or progression whatsoever. They consist of a congeries of isolated scenes. Then again he never knew when to stop in a speech or how to arrange his matter so as to present it with dramatic vividness. The fourth act of *Byron's Conspiracy*, for example, is chiefly made up of a queen's address to an ambassador and his answer, both reported by a third person. Nor could Chapman create characters. His comedies, it is true, are full of sparkling humours well sustained; but the single serious character which appears with any vividness is that of Bussy d'Ambois and Duke Byron—for these are practically the same man, and presumably either Chapman himself or else his ideal of what a hero of romance should be. His language too is very unequal. He could not distinguish between poetry and rhetoric, passion and bombast, so that some of his finest sayings seem to be the result of accident. Whole passages of philosophical reflection or political speculation, well suited enough to an essay or discourse, occur in plays the very life of which ought to be action. The Elizabethan age, rich in men of incomplete genius, whose splendid gifts were under no control, and whose works of art were a rough mixture of dross and precious metal, produced no poet more worthy than Chapman of his own description of those

"That have strange gifts in nature, but no soul
Diffused quite through, to make them all a piece."

Such a poet could never be popular, especially when his plays are neither romantic nor sensational, but crammed with weighty thoughts and tedious dissertations. Meanwhile Chapman has been called a "poet's poet;" and this title of honour he emphatically deserves. Those who are not rebuffed by his clumsiness, dryness, unreadableness, and bombast, will be repaid by the splendour of special passages, by the "full and heightened style" which Webster celebrated, by the beauty and rarity of occasional images, and by sentences of the pithiest and tersest English. Shelley, it is well known, immortalised the following four lines from *Byron's Conspiracy* by placing them on the title-page of *The Revolt of Islam*:

"There is no danger to a man, that knows
What life and death is: there's not any law
Exceeds his knowledge; neither is it lawful
That he should stoop to any other law."

In the speech from which this quotation is taken occurs a passage of brilliant bravado:

"I am a nobler substance than the stars,
And shall the baser overrule the better?
Or are they better, since they are the bigger?
I have a will, and faculties of choice
To do or not to do; and reason why
I do or not do this: the stars have none;
They know not why they shine more than this taper,
Nor how they work nor what."

Much excellent criticism as well as sound philosophy occurs by way of illustration in the mouths of the unlikely personages. Montsurry, in *The Revenge of Bussy d'Ambois*, well defines a poet's art in the choice of diction:

"Worthiest poets
Shun common and plebeian forms of speech,
Every illiberal and affected phrase,
To clothe their matter; and together tie
Matter and form with art and decency."

In the same play the theatre is defended on good grounds:

"Men thither come to laugh and feed fool-fat,
Check at all goodness there as being profaned:
When wheresoever goodness comes, she makes
The place still sacred, though with other feet
Never so much 'tis scandalled and polluted."

The description of Envy (vol. ii. p. 21), the character of Byron (vol. ii. p. 189), the simile of an oak tree torn by

tempest (vol. ii. p. 24), the picture drawn by D'Ambois of a scoundrel to his face (vol. ii. p. 59), King Henry's meditations on the duties and the toils of sovereignty (vol. ii. p. 284), the panegyric of passionate Love in the comedy of *All Fools* (vol. i. p. 117), Tamyra's invocation of the powers of night and silence (vol. ii. p. 33), Cato's meditations on the immortality of the soul and the legality of suicide in the tragedy of *Cesar and Pompey* (vol. iii. pp. 176, 177, 191), are all of them passages of noble poetry too long to quote. The fault of Chapman is that some of his best thoughts and images are conveyed with a fulness of exposition that is more suited to an orator than a dramatist. He is not content with suggesting: he must needs dilate. Yet he can at times be as terse as the most sententious epigrammatist. Here are some examples:

"How blind is pride! What eagles we are still
In matters that belong to other men,
What beetles in our own!"

Or:

"Treason hath blistered heels; dishonest things
Have bitter rivers, though delicious springs."

Or:

"I fear him strangely; his advanced valour
Is like a spirit raised without a circle,
Endangering him that ignorantly raised him."

This brings the whole character of Bussy d'Ambois forcibly before us. In the same way Chapman, when he chooses, can draw a striking picture in a few words. He speaks of "Saxon lansknecchts and brunt bearing Switzers." He describes a river rushing violently:

"His foaming back
Loaded with cattle and with stacks of corn."

The following simile of the lull before a storm is unsurpassable:

"Here's nought but whispering with us: like a calm
Before a tempest, when the silent air
Lays her soft ear close to the earth to hearken
For that she fears steals on to ravish her."

Such are the pearls of poetry scattered freely up and down the plays of Chapman, for the sake of which he will always be read by true lovers of art. Speaking generally, the style of Chapman forms a link of connection between that of Marlowe and that of Jonson. It combines the ruffling extravagance of the one with the ponderousness of the other, Marlowe's fire with Jonson's learning. But Chapman was not a poet in the same sense as Marlowe: the comparison of their several contributions to *Hero and Leander* shows this. Nor again was he as a dramatist on a level with the author of *Volpone*.

Reckoned merely as plays, his comedies are superior to his tragedies. *All Fools*, for example, has the merit of perpetual motion in its quickly gliding scenes and intermingled interests. *May-Day* is rapid in the same style and full of incident. *A Widow's Tears* is the old tale of the Ephesian matron—borrowed from Petronius and somewhat spoiled by a double plot. The conclusion is not well worked out. Tharsalio's conquest of Eudora and the turning of the tables by Cynthia upon Lysander are not in any true dramatic sense accounted for. It may be said in passing that the same weakness of construction underlies the plot of *All Fools*. Marcantio is such an indulgent father that no reason is shown why Fortunio should not marry Bellanora. Yet these comedies as well as *Monsieur d'Olive* and *The Gentleman Usher* are fully up to the Elizabethan standard of the comedy of humour and intrigue, as distinguished both from the grave comedy of Massinger and Jonson and also from the imaginative pleasure-plays of Shakspeare and Fletcher. They rank well with similar compositions by Marston, Middleton, Heywood, and Decker, and are dis-

tinguished by truly laughable scenes in which the manners of the time are mimicked. The same cannot be said about Chapman's tragedies. Here his want of constructive faculty, and his inability to select a truly dramatic story or to present his subject in any spirit-moving fashion, place him as a playwright below Massinger and Fletcher, not to mention such rare masters of their art as Ford and Webster. *Cesar and Pompey* is a stationary series of heavy scenes "out of whose events," to quote the title-page, "is evicted this proposition: only a just man is a free man." *Alphonsus, Emperor of Germany* is a tissue of plots and poisonings, with a most unfortunate incident for its central point, the mixed atrocity, naïveté, and indelicacy of which could have occupied none but a semi-barbarous playwright through five acts of elaborate dulness. The four plays from French history, *Bussy d'Ambois*, *The Revenge of Bussy d'Ambois*, *Byron's Conspiracy*, and *Byron's Tragedy*, though scarcely better put together than Chapman's other dramas, occupy a higher place because of the fine poetry and deep thought with which he has adorned them, and because they set forth one eminently dramatic personality. In Bussy d'Ambois and the Duke Byron, Chapman has realized the character of a brave and heroic soldier, strong to dare but little apt to suffer, gifted with dazzling qualities of mind and body, quick, passionate, and finely tempered, but so overweighted with self-confidence and conceit that he reaches forward to impossibilities and allows himself to be made the instrument of inferior natures. The failure of both these men is the complement of their success. The passion for fame which impelled them to illustrious action degenerates into a mad thirst for glory, and their self-esteem becomes mere swaggering self-laudation. Byron describes himself well enough in these lines:

"Happy Semele
That died compressed with glory! Happiness
Denies comparison of less or more;
And, not at most, is nothing. Like the shaft
Shot at the sun by angry Hercules,
And into shivers by the thunder broken,
Will I be if I burst."

This is in the style of Marlowe's heroes; none of our dramatists have understood better than Marlowe and than Chapman the allurements of inordinate passions—generous affections of the soul, like the thirst for knowledge in Faustus or the desire of empire in Tamburlaine, driven to extravagance. Bussy d'Ambois is cast in the same mould as Byron: but he excites more sympathy, for a chivalrous gentleness is blent in his nature with fiery force; he loves too, and combines the culture of a scholar with the courage of a paladin. Bussy's brother Clermont is a third spirit of the same type, but differentiated by greater modesty and caution. In describing this hero after his own heart Chapman indulges us with some of his most glittering hyperboles:

"What spirit breathes thus in this more than man,
Turns flesh to air possessed, and in a storm
Tears men about the field like autumn leaves?"

And so on through a score of sounding lines until:

"All motion spent,
His fixed eyes cast a blaze of such disdain,
All stood and stared, and untouched let him lie
As something sacred fallen out of the sky."

When in their several tragedies, D'Ambois is murdered and Byron is executed for high treason, Chapman makes both of them to die raving in "King Cambyzes' vein," and pouring forth such frothy praises of themselves as would be fulsome even in a paid panegyrist. Thus he enfeebles the effect of characters outlined with boldness and sustained with enthusiasm. We cannot but feel after closing his best tragedy that Dryden was justified in wishing "to burn a D'Ambois annually to the memory of Jonson."

and that D'Urfey did not underrate its "intolerable fusion." We should have been losers in a purely literary sense by the destruction of any of Chapman's work, since it is singularly characteristic of his age; but if there was a danger in Dryden's days of playwrights being led to imitate his blustering style without a full share of his intellect, the sacrifice of Bussy d'Ambois and of Byron too for that matter would have been a benefit. It is, however, not a little amusing to hear Dryden rebuking the old poet who swayed the republic of letters in the age of James I. much after the fashion of his own dictatorship in that of Charles II. for faults so very like his own—"glaring colours," "dwarfish thought dressed up in gigantic words," "gross hyperbole," "a hideous mingle of false poetry and true nonsense," &c. Chapman, revered as the translator of Homer, as a true philosopher, and as a poet of the first rank, lived to the age of seventy-five and became in his later years a sort of oracle to rising men of letters. "He was a person," says Wood, "of most reverend aspect, religious and temperate, qualities rarely meeting in a poet." Oldys adds that "he preserved in his own person the dignity of Poetry, which he compared to the flower of the sun, that disdains to open its leaves to the eyes of a smoking taper."—He was associated in dramatic labour with some of the best playwrights of the day, with Jonson and Marston and Decker and Shirley. Jonson told Drummond at Hawthornden that he "loved Chapman," and that "next himself only Fletcher and Chapman could make a Masque."

The principle upon which this edition has been made is, to quote the preface, "the *facsimile* principle, a perfectly intelligible and reasonable one, if carried out with undeviating uniformity." Intelligible no doubt this principle must be; but whether it be reasonable, in presenting the works of an old poet to the public, and not to a learned society of antiquarian scholars, may admit of question; and no one can say whether it has been carried out with uniformity without collating all the blunders of the infamously printed originals. In short it is impossible to help regretting that the editors have bestowed pains upon reproducing the misprints, bad punctuation, and confusions of the old copies, which might have been better applied to restitution of the text. I am as adverse as anyone to the principle of unacknowledged conjectural emendations; but I do not see why misspellings of names, mistakes in the *dramatis personæ*, and inversions of letters should be religiously preserved. The following passage chosen at random from *May-Day* is wholly unintelligible:—

"a friendlesse stranger
(Exild his native countrey, to remnine
Thrall to the mercy of such unknowne miads
As fortune makes the rulers of my life)."

Chapman, at the best of times a tedious author to read, becomes painfully wearisome when we have to wade through pages of queer spelling, without divisions into scenes, without a list of characters, and frequently with a most ridiculous shuffling of the persons to whom the speeches are assigned. If Chapman really "supervised in many cases the publication of the original text," as his editors believe, he must have had a patient soul and a singularly low standard of typographical accuracy. In all other respects the edition is satisfactory. Nothing has been spared in the printing, paper, and binding that could impart the agreeable appearance of a genuine old book. The memoir is as complete as the life of a poet of that age can ever be expected to be, and good sense has been shown by its author in the copious extracts from Chapman's critics which he supplies.

J. A. SYMONDS.

Myths and Mythmakers. Old Tales and Superstitions interpreted by Comparative Mythology. By John Fiske, M.A., LL.B. London: Trübner and Co.

It is not easy to say whether the above compilation, which is, as its author calls it, "a somewhat rambling and unsystematic series of papers," is intended for the professional student or the general reader.

Mr. Fiske himself has the latter in view when he says in his preface, "I have not attempted to review otherwise than incidentally the works of Grimm, Müller, Kuhn, Bréal, Dasent, and Tylor, nor can I pretend to have added anything of consequence, save now and then some bit of explanatory comment, to the results obtained by the labours of these scholars; but it has rather been my aim to present these results in such a way as to awaken general interest in them."

Under these circumstances it may well be asked why the reader is credited with such an ample knowledge of Folklore in its widest sense as to understand the slightest allusions to subjects often very remote, such as that made to the dancers of Kolbeck, and to the captain of the Phantom Ship (p. 27). Mr. Baring Gould, who mentions these two traditions in his *Curious Myths of the Middle Ages* (1st ed., vol. i., 29, 30), omits to name his authority (which is Grässe, *Der Tannhäuser und ewige Jude*, 2nd ed., Dresden, 1861, pp. 120, 122); but Mr. Fiske should have done so. Similar omissions will be too often felt by the reader, whose curiosity he thus continually balks after awakening it; though this indeed may be one of the means he speaks of "to awaken general interest."

In spite of these drawbacks he has, as we must admit, one qualification for attaining his object, in being completely master of his subject, and in knowing also how to treat it in an attractive manner. He has not failed to make some excellent observations, as when he remarks (p. 115), "Some clever play-wright, I believe it was Scribe, has said that there are only seven possible dramatic situations, that is, all the plays in the world may be classed with some one of seven archetypal dramas: if this be true, the astonishing complexity of mythology, taken in the concrete, as compared with its extreme simplicity when analyzed, need not surprise us." This remark confirms what has been already noticed in other branches of learning concerning the relative extension and narrowness of the human understanding, which seems in its workings to imitate the processes of nature, producing through the simplest means very complex results; so Pliny exclaims:—

"Jam in facie vultuque nostro, quum sint decem aut paulo plura membra, nullas duas in tot millibus hominum indiscretas effigies existere, quod ars nulla in paucis numero præstet affectando."

But Mr. Fiske has a note on the same passage which suggests a very different remark. Mr. Fiske says, "In his interesting appendix to Henderson's *Folklore of the Northern Counties of England* Mr. Baring Gould has made an ingenious and praiseworthy attempt to reduce the entire existing mass of household legends to about fifty *story roots*, and his list, though both redundant and defective, is nevertheless, as an empirical classification, very instructive." Now this list is indeed very instructive, and the attempt very ingenious and praiseworthy, only it is not Mr. Baring Gould who has made it, but the distinguished scholar, J. G. von Hahn, in the introduction to his *Griechische und Albanesische Märchen* (Leipsic, 1864). Mr. Baring Gould has done no more than make some slight changes, not however for the better, in the mode of stating this theory of *story-radicals*, as he calls them, without any acknowledgment to its real author. Mr. Baring Gould is certainly a very learned man, but at the same time the most confirmed literary annexer alive, and many other examples of his art

might be pointed out, though these are really less astonishing than the assurance with which the annexations are practised, not only from out-of-the-way books, but also from works like Hahn's, Benfey's *Pantchatantra* &c., &c., which are, or ought to be, in the hands of every student of Folklore. Yet so far as I know no reviewer of Mr. Baring Gould's publications has ever been aware of his proceedings, as best appears from the above-mentioned note of Mr. Fiske's, indeed Mr. Fiske seems to put too great faith in Mr. Baring Gould's authority, and would do well to be more cautious in borrowing any of his statements; as, for instance, the following (p. 29): "Tannhäuser was a French knight, and a renowned troubadour." Troubadour indeed! why, the very name of the *troubadour* is right German, as the mere sound of it should have sufficed to warn Mr. Fiske, and a little research would have shown him that Tannhäuser was not a *troubadour*, but a *minnesinger*, who lived about the middle of the thirteenth century, concerning whom, and the causes which made him a mythic figure, minute particulars may be found in von der Hagen's *Minnesinger* (vol. iv., p. 421, ff.) and Holland's "Sage vom Ritter Tannhäuser dessen Leben und Lieder," *Abendblatt zur neuen Münchener Zeitung*, No. 305, 308, 310; cf. Grässe, loc. cit., p. 26.

He belonged to the Austro-Bavarian family of the barons of *Tannhusen*, though later traditions call him a *Franconian knight* (ein *Fränkischer ritter*), which word Mr. Baring Gould has rendered as *French* (vol. i., p. 211), thus misleading his readers, and Mr. Fiske among them, though the latter, to do him justice, does not call the knight a troubadour. Had Mr. Baring Gould cited his authority (Grässe, l. c.) the correction of his mistake would have been easy to attentive students, but he is systematically careless in his quotations as to author, book, and chapter, especially when foreign writers are concerned.

To return to *Myths and Mythmakers*, and without thinking it necessary to develop Mr. Fiske's various statements when he himself has not chosen to do so, I will content myself with pointing out one or two more passages worthy of note. Thus he observes on philological interpretation (p. 210): "The principles of philological interpretation are an indispensable aid to us in detecting the hidden meaning of many a legend in which the powers of nature are represented in the guise of living and thinking persons; but before we can get at the secret of the myth-making tendency itself, we must leave philology and enter upon a psychological study." Similarly, Mr. Tylor remarks (*Primitive Culture*, vol. i., p. 271), "I am disposed to think, differing here in some measure from Professor Max Müller's view of the subject, that the mythology of the lower races rests especially on a basis of real and sensible analogy, and that the great expansion of verbal metaphor into myth belongs to more advanced periods of civilization. In a word I take material myth to be the primary, and verbal myth to be the secondary formation." How much philological interpretation may be abused is self-evident, and has moreover been shown by other writers, especially in reference to nouns proper, but I cannot refrain from repeating here what I have elsewhere said on this subject: "It is quite possible that Lycurgus may some day disappear altogether out of history; his travels have already been declared mythical (Max Müller, *Science of Language*, 6th ed., i, 99); but though the circumstances which seem to point to his solar divinity may be allowed on the whole as of force, I hesitate to assign much weight to the evidence derived from names alone; for though Alkander means Strongman, Lykurgos the Lightworker, Eunomos Good law, and Eukosmos Good order, it must not be forgotten that every proper name originally meant something,

and might therefore be pressed into the service of some theorist: if the Spartan legislator had been called Lake-daemon or Pythagoras instead of Lykurgos, it would have been possible, without much violence, to connect his oracular laws (*πῆραι*) with a name indicating a higher, oracle-giving nature (*λακείν, δαίμων*), or one that spoke by the inspiration of the Pythian god; in Aristobulos, Aristotle, Homer, &c., it would have been equally possible to see a personification of a mythical legislator who bestowed excellent counsel, or pursued the best ends, or joins everything well together. As to the special question of the solar divinity, though the mythological interpretation is doubtless correct in many cases, it has to be very cautiously applied lest we should end by having everything turned into sun gods at once." These are the dangers to which people are exposed by their names, and from which even the author of *Myths and Mythmakers* himself is not safe; for descending probably from some old viking chief who in his *dreki* swam about the seas, and therefore adopted the name of "Fish" (*fiskr*), and telling as he does such pleasant and curious stories, some future mythologist may see in him only an odd fish—in the metaphorical sense of the word—and deny him an historical existence: a fate that likewise hangs over two other well-known scholars, one, Méon, a Frenchman, the other, Mone, a German, who, as Grimm points out (*Reinhart Fuchs* cclii.), being the first editors of the *Renart* and *Reinardus*, may be proved hereafter, by an easy anagram, to be *au fond* the same person. Speaking of real persons thus struck out from history puts me in mind that the *Erlking* mentioned on p. 124, may certainly be struck out from mythological lore (and from such books as Tylor's *Prim. Cult.*, ii. 282) as Mr. Fiske will feel after reading Wilhelm Grimm's observations in his *Irische Elfenmärchen*, p. lxi. In another interesting paper, that on "Light and Darkness," Mr. Fiske enumerates (p. 126, ff.) a number of amusing tales, all referring to the same subject—the Devil foiled by the superior cunning of mortals. He has however omitted one of this class which relates how a lawyer who had made over his soul to the Evil One by the usual contract, as his life drew to a close and the time for the fulfilment of the bond approached, became alarmed, and after much fruitless consultation with the most celebrated jurisconsults of Europe, decided by the advice of his wife to throw the case into chancery, and thus outwitted Old Nick, who declared himself willing to give up his rights rather than submit them to the decision of that leisurely court. There is a better story of this kind, less fitted for quotation, in Rabelais (Bk. iv., ch. 45-47) of Indian origin (see Ebert's *Jahrbuch der Rom. u. Engl. Lit.*, vol. 3, p. 338), and known also in Italy, as appears by Angelo Gubernatis' *Novelline di Santo Stefano*, Torino, 1869, Novell. 34.

Mr. Fiske (p. 100) refers to an Irish story, in which a number of old women prepare to fly up the chimney by singing, "By Yarrow and Rue, and my red cap too, Hie me over to England." For the manifold magic virtues of rue see Perger's *Deutsche Pflanzensagen*, Stuttgart, 1864, p. 203. Wuttke's *Der Deutsche Volksaberglauben*, 2nd ed., Berlin, 1869, § 133. About yarrow, Perger, in his *Deutsche Pflanzensagen*, only says, "Yarrow is a remedy for convulsions in children, for the plague, and for a murrain in cattle—it was supposed to grow up wherever the tablecloth spread for a meal on Christmas Day was shaken out." It must not be forgotten that according to a superstitious belief of the Tyrolese the crumbs that fell to the ground on this occasion belonged to the dead, and there is a kindred superstition in Russia, mentioned in Ralston's interesting volume, *Songs of the Russian People*, 2nd ed., p. 321; cf. my review in *Gött. Gel. Anz.*, 1872, p. 953. FELIX LIEBRECHT.

LITERARY NOTES.

In Westermann's *Illustrated Monthly* for August, Freiherr von Maltzan gives a lively and interesting sketch of the life and opinions of a certain Hadschi Wekkes, the only *aufgeklärter* thinker it has been the writer's fortune to meet with amongst the Arabs. Hadschi Wekkes is still living, at Aden, and Maltzan reproduces from a poem of his a wonderfully simple and graphic description of a three days' journey into the mountains which he took with his flock, when a shepherd boy, to seek instruction from a saintly sage, Abdallah, who had taken refuge from the persecutions of strict, orthodox theologians in a haunted ruin. The same poem gives a slightly novel turn to a story the author professes to have heard in childhood, of a magical wood, the trees of which bear at the same time buds, blossoms, and fruit, setting and already ripe. But at the foot of every tree is a glittering serpent with sharp, red tongue, and many of those who have reached the wood through many difficulties turn back at last afraid of the serpent's venom; others, hoping the serpent may be harmless, stretch out their hands for the fruit, but are bitten, and draw back, too late, for the bite is mortal; a very few do not heed the bite in their eagerness for the fruit—which is wisdom and also the antidote to the sting of the serpent—natural human error. The doctrine of Hadschi Wekkes is represented as a very simple, natural rationalism, too simple to make converts in Arabia until he consented to mix a little of the mysticism of the Sufis with his own opinions in expounding them to beginners. He has frequently been accused of heresy by the Muftis, but the charge cannot be brought home to him; if he is asked what he believes concerning God, he replies: "I believe He is the great Unknowable," which, in Islam, is an orthodox though not the most satisfactory of answers; to a similar inquiry concerning angels, he returns: "I believe that no man can see them"—which again is orthodox as far as it goes, but not quite conclusive as to a belief in their real existence; other questions are parried with the same ingenuity. Hadschi Wekkes believes in human depravity because children and savages are unmerciful, but the last we hear of him is as posing an English clergyman who wished him therefore to believe in the Scriptural account of the Fall, by the argument that Adam must have been bad to begin with or he would not have been tempted by the apple.

In the same journal for July G. Rosen translates some weird, and, from the mythological point of view, very interesting Macedonian poems. The popular beliefs and legends of the Bulgarians, Servians, and Lithuanians are remarkable (much more so than those of the modern Greeks or Albanians) for the abundant traces and relics of paganism preserved in them, a proof of antiquity the more valuable because tradition does not seem to have much respect for the letter of the songs, which vary much from one district to another. Three of the poems translated—"Jana and the Sun," "Little Daughter Todora," and "Stoina and the Dragon"—are valuable examples of unmistakably elemental fairy tale.

Art and Archaeology.

The Metopes of Selinus. [*Die Metopen von Selinunt.*] By Otto Benndorf. Berlin. 1873.

THE brief existence of Selinus from its foundation in 651 B.C., or at the latest 628, down to its ruthless destruction by the Carthaginians in 409 B.C., forms a page of history to which the student of Greek art turns with more than usual interest. Not that artistic activity is known or supposed to have been greater there or of a higher quality than elsewhere then, but because the ruined temples of that city have yielded a series of sculptured metopes which present in one case a most peculiar and in another a most fascinating phase of Greek art, and, in particular, because these sculptures derive much additional importance from the fact that the possible limits of their date are so narrowly circumscribed. We have on the one hand four metopes (vii.-x.)

which cannot be later than 409 B.C. One would say that they must have been executed previous to 415 B.C., the date of the Athenian expedition against Sicily, the commotions arising from it having presumably been too great to permit such undertakings. It is indeed now the uniform opinion that these metopes fairly represent Greek sculpture in the condition in which Pheidias found it, that is, possessed of an overbearing tendency to minute gracefulness, but at the same time feeling its way towards the expression of life in a manner consistent with that tendency. No doubt the style which preceded Pheidias in Attica may have endured to a considerably later period elsewhere, especially in a Doric colony like Selinus. Then we have another set of metopes belonging to what is regarded as the oldest of the Selinuntian temples, and as furnishing the first authentic and as yet the clearest glimpse of that early stage of Greek sculpture when the foreign elements with which it had grown up were being fast eliminated, and the basis laid of a perfectly independent art. It is not within the range of absolute proof that these metopes belonged to a temple erected by the Selinuntians soon after their settlement about 630 or 600 B.C. All that is known is that they were part of one of the oldest of the temples of which we have still the ruins. And it is argued, first, that the character of the work points to the earliest date possible under the circumstances, and secondly that it is necessary to assume as long an interval as can be obtained between the date of their execution and that of the metopes already mentioned as reflecting the style of sculpture current just before Pheidias. Selinus was a prosperous colony from its very beginning down to its destruction by the Carthaginians, and we may be sure that in the first years of its prosperity it did not overlook the first duty of a colony, to erect a temple worthy of the protecting deity of the mother city. The only question therefore is, and it is generally answered in the affirmative, Do these metopes belong to the first temple? To account for the strangeness of the style in which they are executed, it has been found necessary not only to assign them the earliest possible date, but also to charge Egypt, the East, or Etruria, as happened to be the fashion of the time, with a depressing influence on their authors. So far as the East is concerned, meaning Assyria in particular, there is now no doubt of its having largely influenced the early development of Greek art, and though it would be difficult to point out any positively Oriental element in the metopes of which we are speaking, it would not perhaps be far wrong to assume that the native gift of gracefulness shown in the details of the figures could not have been paired with the grotesque stiffness of the action unless in the person of an artist who was growing out of the traditions of a style with which by nature he had no sympathy, and that style, of all others, the Assyrian.

Though these metopes, and especially the earliest ones, have been long duly recognised as works of the highest importance in the history of Greek sculpture, they have hitherto been neither adequately published nor examined with critical thoroughness on the spot. It is therefore with exceeding pleasure that we welcome this work of Dr. Benndorf's, in which regard has been had to both these points with a most satisfactory result. The engravings have been made from photographs, a process which presents a more apparent than real truthfulness unless assiduously watched, as we believe to have been the case here. Much new material, the result of recent or hitherto unsatisfactorily reported excavations, appears both in the plates and in the text. We have first a discussion on the topography and the public events recorded of Selinus, the latter subject recurring again further on, where, in dealing with a most interesting but very fragmentary inscription

recently found, a question arises as to a war between the people of Selinus and their neighbours of Segesta, for which as yet we have only the authority of a reasonable emendation in the text of Diodorus, xi, 86, 1-3. The inscription seems to confirm the justice of the emendation. Then follows an account of the various excavations that have been made, beginning with those of Angell and Harris, two young English architects who spent the winter of 1822-3 in exertions which, though fortunate in the highest degree to our knowledge of Greek sculpture and architecture, must be deplored for having cut off the life of Harris in the full promise of youth. The work thus interrupted was resumed in 1831 at the instance of the Duke of Serradifalco, and was attended with the discovery of three new metopes, besides the recovery of two which the previous excavators had been prevented from removing. From that time nothing more was done until the summer of 1865, when Cavallari, whose experience under Serradifalco entitled him to the position, was appointed by the Italian Government to carry on the work of exploration.

From an architectural point of view the temples of Selinus have occupied a conspicuous position ever since the publication of three of them by Wilkins in 1804-7, and considering that in many points the authorities, such as Hittorff, Bötticher, and Semper, entertain very different opinions, any successful effort to hold the balance evenly between them, and to give an essentially accurate view of the whole question, must be regarded with favour. This Dr. Bendorff has done in the chapters devoted to architecture. It should further be stated that, in order to make his work as complete as possible, he has appended a chapter on the coins of Selinus by the well-known numismatist Dr. Imhoof-Blumer.

ALEXANDER S. MURRAY.

NOTES ON ART.

Mr. John W. Wilson, who, it will be remembered, a short time ago presented to the Louvre his newly acquired fine painting by Constable, has now distinguished himself by another act of generosity. On the 15th of August at the Gallery of the *Cercle artistique et littéraire* at Brussels, he opened an exhibition of his magnificent collection of paintings by ancient and modern masters, the whole of the proceeds of the exhibition being devoted to the benefit of the poor of Brussels, which, it appears, is Mr. Wilson's native town. Mr. Wilson bears the whole expense of this exhibition, so that nothing may be deducted from the sum gained for his charitable purpose; and not only so, but he has had a catalogue prepared, which is quite a work of art in itself, being splendidly printed by Messrs. Clay of Paris, and illustrated with fifty-five fine engravings and etchings by the best engravers. This catalogue is sold at twenty francs, likewise for the benefit of the poor. Most of Mr. Wilson's pictures are of the Flemish and Dutch schools, but the English school is represented by some of its greatest painters, and the French school may also be studied in this varied and well assorted collection. The celebrated picture known as "Le Roi boit," by Jan Steen, is perhaps the chef-d'œuvre of the exhibition.

We learn from the *Chronique* that the committee formed for the celebration of the fourth centenary of the birth of Michael Angelo (May 5, 1875) has already arranged the principal articles of its programme. It has been resolved that the complete correspondence of the artist, and all the documents, published and unpublished, relating to his life and works, shall be offered to the public in a magnificent volume "édition de luxe;" that artists shall be invited to send drawings illustrative of his life, which will be photo-lithographed and published as an album; also that all the great works of Michael Angelo and the most important of his drawings shall be reproduced in like manner. It is moreover proposed that a medal shall be struck in his honour; a commemorative tablet placed on the house in which he was born at Caprese, and another on the house which

he so long inhabited at Settignano; that casts from all his principal sculptures shall be placed with his statue of David in the Tribune at Florence, and that the municipality of that city shall be invited to raise a monument in his honour.

Dr. Schliemann, whose excavations at Troy have for some time attracted universal attention, gives in a letter to the *Augsburg Gazette*, written from Troy on July 17, a fuller account than we have hitherto had of his discovery of a chest of valuables—"King Priam's treasure" as it has been called—dug up near the walls of the ancient city. Golden vessels, idols, and objects of personal adornment seem to have been thrown together into this chest in the utmost haste and confusion. In a large silver urn were found two splendid head-dresses, one of which was composed of a chain of gold twenty inches long, to which eight smaller ones were attached bearing a small idol in the shape of an owl's head at each end, apparently meant to hang down over the temples; 174 smaller chains covered with golden foliage connected the two pendants and terminated by a double leaf three-fourths of an inch long. Six bracelets, a diadem of curious workmanship, fifty-six earrings of artistic design, two small vases of the finest gold, and thousands of smaller articles such as buttons, rings, beads, stars, were likewise found in the same urn. None of the earrings it is said bear the slightest resemblance in form to those of the Egyptians, Greeks, Assyrians, or Romans, but are of quite distinct artistic workmanship. Fortunately as the urn had remained upright in the chest in which it had been originally buried, it was possible to carry it away intact, and not one single article that it contained was lost.

French art has experienced a great loss in the death, on the 7th of August, of the eminent landscapist Antoine Chintreuil, at the age of fifty-nine years. M. Chintreuil was a pupil of M. Corot, and his landscapes were usually bathed in the peculiar luminous mist that distinguished those of his master. In the Salon of this year there were two works by him, "Pluie et Soleil" and "Marée basse," both remarkable for their poetic feeling. "Chintreuil," says one of his critics, "laisse une œuvre considérable et peu connue. Il est de la race des artistes dont la célébrité grandit sur leur tombe."

The Antwerp Salon was opened on the 10th of August, and is said to be a large and fairly good exhibition. Among the foreign contributors we only notice one English name, that of Mr. J. W. Oakes. MM. Alma-Tadema, Israels, Portaels, Baron Wappers, and other names familiar to our London exhibitions are to be met with in the catalogue, which comprises no less than 1,256 works.

The *Daily Telegraph* announces that the curious remains discovered by Mr. George Smith in Assyria will shortly arrive in London. One of these is a mythological tablet on which the amorous adventures of the Goddess Ishtar, the Assyrian Venus, are recorded. The Goddess, it appears, was originally married to a Deity called the Son of Life, but she quarrelled with her husband and entered on a series of discreditable amours. She has the fatal power of bringing misfortune on all whom she loves; one object of her passion is changed into an animal and torn to pieces by his own dogs, and others are treated with similar cruelty when the fickle Goddess is tired of them. Only Izdubar, the great Assyrian ruler, has courage to resist her tempting charms, and like Adonis declines the invitations of the Goddess, whereat in a rage she returns to her celestial kingdom, and we may hope becomes reconciled with her husband the Son of Life.

The National Portrait Gallery only acquired eighteen new works during the whole of the past year. The principal of these was the portrait of Sir Thomas Gresham by Antonio Moro. The total number of visitors to the Gallery increased however to 67,039.

The *Chronique* informs us that the picture that has been most frequently copied during the past year at the South Kensington Museum is "The Surprise," by Dubufe: a bust portrait of a lady surprised at her toilette. This clever portrait painter of

the modern French school has met with no less than nineteen copyists, whereas Reynolds and Gainsborough have only had five or six in the same space of time.

Her Majesty's Commissioners, who this year made a collection of the works of John Philip, R.A., and Thomas Creswick, R.A., at the International Exhibition, have decided to follow up this course in future years with the works of other eminent deceased artists of the English school.

John Constable, R.A., Augustus Egg, R.A., David Roberts, R.A., and David Wilkie, R.A., painters in oil, and J. Coney, J. S. Cotman, F. Mackenzie, S. Prout, A. Pugin, J. M. W. Turner, R.A. (architecture only), and C. Wild, painters in water colours, are the artists selected for 1874; and owners of pictures by these artists are invited to lend them for exhibition, and are also requested to furnish as much information about them as they possess.

New Publications.

AUTHOR OF "SAINT ABE." White Rose and Red; a Love Story. Strahan.

BETSY LEE: A Fo'c's'le Yarn. Macmillan.

BOTTREL, W. Traditions and Heartside Stories of West Cornwall. Second Series. (Penzance.) Trübner.

CLASSIKER, deutsche, d. Mittelalters. Begründet v. F. Pfeiffer. Leipzig: Brockhaus.

FIRMIN-DIDOT, A. Recueil des œuvres choisies de Jean Cousin, peinture, sculpture, vitraux, miniatures, gravures, &c. Paris: Firmin-Didot.

GÉRARD, Ch. Les artistes de l'Alsace pendant le moyen-âge. Colmar: Barth.

HAMILTON, A. Contes d'Hamilton, publiés avec une Notice de M. de Lescure. II. Fleur d'Épine. Paris: Lib. des Bibliophiles.

HARTMANN-FRANZENSHULD, E. v. Deutsche Personen-Medaillen d. xvi. Jahrh. namentlich einiger Wiener Geschlechter. Wien: Gerold's Sohn.

HARVEY, W. W. Royston Winter Recreations in the Time of Queen Anne, metrically translated from a contemporary Latin Poem by T. Wright, M.A., physician; with Notes on Royston Memorabilia. Longmans.

HOUDOU, J. Joyeuse entrée d'Albert et d'Isabelle. Lille au xvi^e siècle, d'après des documents inédits. Lille: Danel.

MARGUERITES (les) de la marguerite des princesses. Texte de l'édition de 1547, publié avec introduction, notes, et glossaire, par Félix Frank. Paris: Lib. des Bibliophiles.

SAN-MARTE. Wilhelm von Orange. Heldengedicht von Wolfram v. Eschenbach. Zum ersten Male aus dem Mittelhochdeutschen übersetzt. Halle: Waisenhau.

STORI pisci hroatski. Knjiga V. Pjesme Nikole Dimitrovića i Nikole Najeskovića. Agram: Cuppan.

TRENCH, Archbp. Plutarch; his Life, his Lives, and his Morals. Four Lectures. Macmillan.

WHITE, J. P. Lays and Legends of the English Lake Country. J. Russell Smith.

Theology.

Literature and Dogma. By Matthew Arnold, D.C.L. Smith, Elder & Co., London. 3rd edition.

WHEN I was invited to contribute a critical appreciation of Mr. Matthew Arnold's last book to the columns of the *Academy*, I felt, first, highly flattered by the honour done me, and secondly much alarmed at the prospect of venturing—as a stranger to England and English life—to pass judgment on such a writer in the presence of English readers. Mr. Matthew Arnold passes on the continent for a writer of great—and very English—originality, which places him to some extent in a position of isolation even amongst his own countrymen. There is something in the combination of daring and moderation in his ideas, of tendencies often radical with conclusions generally conservative, that seems exactly fitted to bewilder a continental intellect, especially the intellect of one belonging by birth to the category of "the average sensual man," to which Mr. Arnold thinks the

French nation *in globo* must be referred. How can I venture upon the most modest criticism without exposing myself to the retort provided in advance by a great apostle: "The natural (or sensual*) man receiveth not the things of the Spirit of God." Nevertheless I have persevered in my undertaking; every country exhibits some intellectual phenomena which have the effect of living paradoxes upon those who can only contemplate them from a distance. A philosopher whose theodicy borders upon what is elsewhere called Pantheism, or even Atheism, who admits none of the Bible miracles, who rejects the Trinity of Athanasius and the supernatural inspiration of the Scriptures, and at the same time calls himself a sincere Christian and a devout member of the Established Church of England,—such a philosopher is for most of us as inexplicable a mystery as that presented to the rigid Protestants of England by the existence of the large class of French fathers of families who have abandoned the Catholic Church, who hate the Roman clergy and are always denouncing or ridiculing them, and yet send their sons to be educated in clerical schools, and allow their wives and daughters to go to confession. If, however, English readers care to have the opinion of a foreigner upon an author and a religious theory which are both strongly national, as well as highly individual, the foreigner can only acquiesce, and prepare to do his best, reminding those who will find his attempt unsatisfactory after all of a proverb current in his native land: "La plus jolie fille du monde ne peut donner que ce qu'elle a;" a point and probably the only point in which the prince of criticism himself would resemble "la plus jolie fille du monde."

At the same time, these circumstances impose a preliminary duty upon us. Mr. Matthew Arnold has not only a great deal of learning, he has also "beaucoup d'esprit." His book is extremely attractive reading, though it treats seriously of the most serious questions. The severity of his arguments is often seasoned with humorous remarks and very ingenious illustrations. He has a way of his own of crushing an opponent while affecting to offer respectful homage, which almost recalls the *Provinciales* of Pascal, and his trinitarian history of the three Lord Shaftesburys is very amusing. One is sometimes perhaps tempted to think that the incessant repetition of the same ironic point which raised a smile the first two or three times of its occurrence, is an offence against good taste. But prudence and courtesy alike warn us not to follow him on to this ground, and we propose to consider his book as if it were not directed against any local opposition, but on its merits, leaving out all the polemical parts, as a book of European interest, discussing what may be justly called a European subject, the desirable and inevitable transformation of Christian doctrine.

Seen from this level, the book appears to us one of the most interesting documents for the contemporary history of religious ideas. It is evident that it must pass amongst conservative theologians for negative in the extreme, not to say nihilistic. But though the author puts aside as so much legend what they regard as the most important truth, nevertheless his intention is, if not conservative, at least affirmative, and his aim to construct rather than to destroy. Like so many other

* Why that unpleasant epithet *sensual*? There is absolutely nothing to prove that there is more sensuality in France than elsewhere. I think the ingenious author would have been more nearly within the bounds of truth if he had said that in almost everything France represents the *mean* in Europe. There are few points upon which we are not constrained to acknowledge the superiority of one nation or another, but on the other hand, we are second in almost every field to the different nations which surpass us each in their own. A number of details might be alleged in support of this observation, the key to many of our national qualities and national defects.

thinkers of the day, Mr. Arnold has watched the process by which the blows of independent criticism clear away the scaffolding upon which former generations relied with naïve confidence to prop the edifice of their faith and their dearest hope. There are some who resign themselves to remaining stationary amongst the ruins, believing it to be impossible to find materials there for the erection of a new sanctuary where the spirit of modern times might find comfort again as heretofore in peaceable communion with God. But there are others, and Mr. Arnold is of the number, who are too religious, too much attached to the Gospel and to the incomparable joys of which the Christian life is the sole source, to accept this melancholy quietism. Their soul is athirst for the lost, living God, it seeks him with ardour, and they try to reconstruct methodically, in conformity with the dictates of experience, and in harmony with the criticisms of science, that spiritual temple with which humanity can only dispense at the cost of falling below even the moderate level already attained. There is something very noble, generous, religious, and altogether Christian in such an endeavour, even though it were to fail; and Mr. Arnold's theological adversaries, far from reproaching him with what they think his impieties, should congratulate him on his efforts. They believe themselves to possess the treasure which Mr. Arnold thinks is in danger of being lost in their keeping, and desires to rescue for them, for others, and for himself. What more praiseworthy? Would they rather have him appear as an apostle of irreligion, or the demolisher of Christianity? They cannot prevent his state of mind from being shared by many, whose intellects have been formed by modern culture, and who have been brought to the same point, without their own will or prescience, by the general, impersonal march of contemporary thought.

One might define Mr. Matthew Arnold's theology as a religious doctrine with a positivist basis, aiming to develop itself by a purely experimental method. Perhaps he might protest against the word "theology" as applied to his theory of religion and morality; but one must call things by their right names, and however much he may differ from his predecessors or his rivals, a doctrine relating to man, God, the Bible, Jesus, his teaching and the church, is neither more nor less than a theology. Amongst the essential elements of antecedent theologies there are things for which he, evidently, has a supreme antipathy; especially all such as do not admit of experimental verification. It is apparent that the idea of the Personality of God, and of Providence, in the common acceptance of the word, are to him simply, and even revoltingly absurd. He objects to the *a priori* in religion, and if he were to be judged by his premises alone, he might be classed among the absolute sceptics who can see nothing in the religious history of the human mind but a series of dreams, or rather nightmares.

But this would be to do him crying injustice; for how does he proceed in systematising the data of experience?

He starts from the fact, which for him is axiomatic, that the proper object of religion is *conduct*; "to do what we very well know ought to be done;" and that it embraces consequently at least three-fourths of human life. We should notice the very positive persistency with which he returns again and again to this computation. If we wished to be captious, we might ask whether it is possible to measure in this way the proportionate importance of the things which form the whole of human life by the time which is occupied with them; at this rate sleep, with its inevitable adjuncts, occupying a good third of life, would be a formidable rival to religion. But leaving this detail, which does not necessarily affect the validity of the doctrine: *conduct* is then the proper and the very important object of religion. We must

not however treat morality or ethics as simply and entirely the same as religion: there is no antithesis, but a difference of degree. "The passage from morality to religion is made when to morality is applied *emotion*." Then morality, heightened and vivified by sentiment, becomes *righteousness*, the central idea of the Old Testament. God, whose essence escapes all attempts at metaphysical explanation, is, according to the experimental method, "the stream of tendency by which all things fulfil the law of their being;" and since the supreme law of man's being is to develop himself in the direction of morality, God (still experimentally) is recognized by man as "the enduring power, not ourselves, which makes for righteousness."

Such was the God of Israel. The monotheism of the Israelites proceeds from hence; that at the decisive, initial moment of their religious development, out of the many aspects of the "not ourselves" by which nations feel themselves to be overborne, they concentrated themselves exclusively upon that in which the not ourselves "makes for righteousness," and so urges us to happiness. This was the revelation, properly so called, of the Old Testament. For there is no real opposition between natural and revealed religion. The opposite of natural religion is *artificial* religion. The latter adds by way of superstructure to natural or revealed religion, a superstition, or to speak more precisely an *extra-belief*, more accommodating than pure religion to the weaknesses and appetites of the human soul, which perhaps cannot be avoided at certain times and places, but always ends by compromising the pure religion upon which it fastens as rust upon a metal. This was what happened to the Israelites when they added, or rather substituted their messianic chimera for the simple faith in a power which acts upon us, impelling us to righteousness, and through righteousness to happiness; and therefore the work of Jesus was a second revelation, grafted upon and continuing the first. He also took his stand upon the ground of righteousness, and devoted himself to restoring the conception of it in its purity, while at the same time giving a more exact description of its nature. The kingdom of heaven which he announced was still the happiness inherent in the practice of righteousness. The explanation of the value of Christianity is however to be found elsewhere than in the metaphysics of Christians; neither prophecy nor miracles furnish tenable arguments in its favour. To follow Christ is merely to embrace his righteousness and happiness. The originality of Jesus proceeds from a threefold source; his *method*, his *secret*, and his personal charm, that *ἐνσυνέχεια*, that *sweet reasonableness* which makes his person the strongest of all attractions towards righteousness. His method consists in bringing each man back to the examination of his inner being, to study and verify his moral condition, his needs, his inclinations, his wretchedness, and to try and test himself without ceasing. His secret is that the way to attain to true righteousness is in the act of dying to self, that is to say, of renouncing heroically all the impulses and desires of the carnal man, and the painful side of this indispensable sacrifice is compensated—as, again, is proved from experience—by the peace, the intense joy which springs from it. Such is the revelation of Jesus, brought into relief and strengthened for all ages by his personal sweetness, "the medium through which the method and the secret were exhibited," and which produces "a total impression ineffable and indescribable;" so that his disciples could condense the search after and the practice of righteousness into faith in him and ardent devotion to his person.

Still, amongst those by whom Jesus was surrounded, and still more amongst those who came after him, the *extra-belief* re-asserted itself. Christianity became superstitious,

chiefly by forgetting the *method*, or the constant reference to inner experience. Protestantism was a vigorous attempt to revert to this method, sometimes to the injury of the *secret*, which has been better preserved by Catholicism. Neither of them can aspire to reproduce the mind of Jesus in its purity; the spirit of modern times has made breaches in both strongholds. The common Protestant notions of the Bible, and the Puritanical doctrines, that still retain their popularity, of the Trinity and the Atonement, are particularly exposed to the blows of unanswerable objections. Their only value consists in the meaning which it is still possible to attach to them when translated into the language of the religious morality conformable to the essence of the Old and the New Testament. In undertaking such a translation, it has to be borne in mind that the language of the Bible is not dogmatic, but literary, poetic, approximative rather than technical; yet with this reservation the Bible remains pre-eminently the book of religion, revealing the idea of righteousness in the Old Testament, and in the New, Christ with his method and his secret. A national, historical church, which enlarges its foundations so as to include within it all who call upon the name of Christ and depart from iniquity, is much more in keeping with the present and future interests of religion than the close, narrow, and obstructive societies in which the Puritan spirit delights.

I do not think that I have omitted anything essential in this abridgment of a religious theory which does not err either by excess of vigor or excess of rigor. I might even admit that, taken in their most general sense, the author's conclusions seem to me fairly satisfactory, though I should doubt the possibility of their application to the Established Church of England. I cannot conjecture how far such a radical transformation would be possible to it without risk of apostacy or dissolution. The author evidently has a feeling of filial attachment to the venerable institution, which indeed makes him occasionally unjust to certain doctrines and certain schools. One is surprised to hear so liberal a thinker speak of Socinians, *i.e.* Unitarians, with the disdain of a High Churchman who cannot bring himself to speak of heretics except by the name of their real or supposed heresiarch. He seems on the other hand to forget the mystical profundity of Calvinist doctrines and to refuse to see any but their repulsive sides. Still I am prepared to acknowledge that in the presence of the existing tendency towards excessive subdivisions in religious thought, a truly national church must widen her boundaries as much as possible or cease to exist, and it is sincerely to be wished that the noble Church of England, to which we owe so many illustrious theologians and so many admirable works, may once more become increasingly national in this sense.

But to leave the conclusions and ascend to the premises, which I cannot think clear or admissible. Mr. Arnold's essay in religious reconstruction bears a certain analogy to the one connected with the name of Kant in the superiority accorded to the moral or ethical element over all dogmas, ceremonies, or ecclesiastical institutions. But does he succeed better than Kant in assigning to religion, properly so called, the part which lawfully belongs to it? This appears extremely doubtful. The author indeed tells us that there is a distinction between religion and morality. Morality becomes religion when "to morality is applied emotion." No doubt; but emotion of what? In Mr. Arnold's system I find no emotion except that which we experience at the thought of the "power not ourselves which makes for righteousness." This is his substitute for the answer which we should have thought preferable; that morality becomes religion when it is inspired by the love of God. Now I fear that the majority of souls are so constituted as to be ex-

tremely little moved by the thought of a power which urges us towards righteousness in much the same way as the fall of a body of water makes a mill-wheel turn.

This is the place to state the gravest objection to which this—in many ways seductive—theory is exposed. Mr. Arnold is decidedly too much afraid of the idea of the personality of God. He nowhere explains why it is that the idea repels him, but the repulsion is everywhere apparent. Doubtless he has good reason to protest when he is told that God is a *Person*; for a person is a being finite, circumscribed, opposed to other beings. But it is one thing to say that God is a *person*, and another to say that God is *personal*. By a personal God one understands not a person like you or me, but a God possessing in a far higher degree than mere human persons that consciousness and intelligence which, within the limited circle of our experience, are only possessed by personal beings. It is in vain to ask, how we can verify the fact that God possesses them. In the first place I should answer that the experimental study of the universe discloses too many ends, aims, and harmonious coincidences for it to be rationally possible to deny conscious intelligence to the sovereign mover of that "stream by which all things fulfil the law of their being." But I should say further: As soon as you tell me of a "power not ourselves which makes for righteousness," the first question that inevitably presents itself to my mind is: Is this power conscious, intelligent, that is to say personal? or is it blind, unconscious, impersonal? But why do I necessarily ask myself this question? out of simple metaphysical curiosity? By no means; it is because there depends upon its solution the further question: Shall I worship it or not? Has not Mr. Arnold observed that man no longer worships powers of which he has discovered the nature to be impersonal? Men paid fervent worship to the sun as long as they believed the sun to be somebody. From the moment when they discovered it to be only a burning globe they ceased to feel the slightest devotion to it. If the not ourselves which makes for righteousness is an unconscious force, I cannot feel for it that sacred emotion which raises morality to the rank of religion. Doubtless in consulting my own interest, rightly understood, and in conforming to reason and experience, I may yield to this power which impels me to righteousness, but there will be no religion in my acquiescence, for it will be an affair of calculation, untouched by the faintest emotion. If I were afterwards to find happiness follow from obedience to the impulse, I should only be able to feel towards the beneficent power, which was ignorant of its own existence, something like the sentiment inspired by a mineral spring of which the waters have restored my failing health. In a word, it is this power itself, this not ourselves which makes for righteousness, that constantly reveals to us the fact that it is a Spirit, that is to say not merely an influence, but life, consciousness, and love; and the revelation is made since this notion is necessary to the effect which the Power tends to produce.

It is inexact to say that the pure and simple object of religion is conduct. The moral sentiment did not give birth to the religious. In former times, and even at the present day, we know that intense religion may be found in nations and individuals combined with a very lax moral condition. The truth is that morality and religion are like two sovereigns having an equal title to the supremacy over the human soul for which they contend until at length it is discovered that the only necessary and truly beneficial application of religion to life is its moral application, and that on the other hand morality, to become solid, serious, and constant, must draw its inspiration from religion. This is the Christian view, which does not establish an antithesis between religion

and morality, but maintains their distinctness while making their influence reciprocal. Morality deals with concrete, practical life, such acts as conscience commands; religion is the sentiment, the emotions which man experiences in the presence of the Absolute, whose immensity, omnipotence, and unfathomable mysteriousness attract him, and which he represents to himself in accordance with the best light he has. This, in my judgment, is the point from whence we must start to obtain an exact notion of the relation between religion and morality; and I cannot but think that Mr. Arnold's theory would have been greatly a gainer if he had started from a less meagre, a more living, a more religious conception of the Deity.

He would have been able in this way to give a more plausible explanation of the person and the work of Christ. I agree with the author that Jesus did propose to himself to restore the true idea of righteousness and to point out its real conditions. But upon what do he himself and his disciples evidently suppose his preaching and ministry to rest? Upon the abstract notion of a "Not ourselves" (it may be unconscious), of a moralising force? By no means; but upon a feeling, intense and pure, of the living God, the feeling of God as a father. But such a sentiment is absurd in relation to an impersonal God, it is only possible or suitable in relation to a God who possesses,—granted in an indescribable degree,—but still really possesses those perfections of existence to which the conscience, the intelligence, the power of loving in man are but feeble approximations. It is only by doing great and constant violence to the gospel history that it becomes possible to separate the moral preaching of Jesus from the directly religious basis upon which it rested throughout.

Several other historical objections might be urged against this theory of purified Christianity. For instance, the history of religion by no means confirms the statement that the proper object of religion, in itself and considered in its original manifestations, was conduct. Neither can I see that history confirms Mr. Arnold's explanation of the intuitive monotheism of the ancient Israelites. Monotheism, according to history, was at first nothing more than a simple *monolatry* which only developed into a monotheism based on principle, through the action of events and of the great prophets posterior to David and Solomon. The use which Mr. Arnold makes of the fourth gospel is extremely arbitrary, and contrasts strangely with his advanced views on the general subject of Biblical interpretation. It seems at times as if he had lost sight of the formidable arguments brought by contemporary criticism against the historical character of the words attributed to Jesus in this gospel. We ought never to forget that this remarkable book, as a great and ingenious critic has observed, makes Jesus say in the first person what every Christian heart says to him in the second.

But I cannot end my examination of the work without again doing homage to the intentions and the talents of the author. I have seldom read a book more penetrated with the great need that the present age feels for a religious renovation that, without breaking with the past, will do justice to the progress accomplished by the general intelligence. Even while feeling called upon to protest against sundry allegations, I regard the general impression left by the work as wholesome and encouraging. We who agree with the author as to the necessity of recasting Christian teaching, who believe, with him, in the future of Christianity, better understood and restored to something nearer its original shape, who think, with him, that neither dogmas, priests, nor ceremonies can save, but only a disposition of the heart thirsting for righteousness, must sympathise with all the noble and upright efforts which contribute to the edification of that

future church in which all those who love Christ and his righteousness will meet together. The imperfections or omissions in particular works ought not to discourage us respecting the collective result. It is a school for mutual instruction where every one teaches the others and learns from them. All co-operate in the great work of the kingdom of God; and even while maintaining my criticisms I sincerely wish and hope that England may send us many more books as powerfully conceived, as boldly written, as instructive and giving as much food for reflection as this of Mr. Matthew Arnold.

ALBERT RÉVILLE.

Hermæ Pastor. Veterem Latinam Interpretationem e codicibus edidit Adolphus Hilgenfeld. Lipsiæ. 1873.

IN 1866 Professor Hilgenfeld gave us a beautiful edition of the Greek text of the *Pastor*, from the Sinaitic and Leipsic manuscripts, in his *Novum Testamentum extra canonem receptum*, and he has now increased our obligations to him by restoring the text of the old Latin version. It is a work for which previous labourers had prepared the way, but which was still waiting for completion. The *princeps editio* was that of Faber Stapulensis (1513), in which many arbitrary changes were made in the text, chiefly in the direction of a more classical Latin, and this has formed the basis of the vulgar text. After him Cotelierius collated three Paris manuscripts, one of which, containing, however, only a small fragment at the beginning, belongs to the ninth century. Fell collated two English ones, judged by Hilgenfeld to be of great value. These labours were made use of by subsequent editors. In 1857 Dressel edited the *Pastor* in his works of the Apostolic Fathers, with the readings of a Vatican manuscript of the fourteenth century, and also printed for the first time another Latin version from the Palatine codex, on which, however, he set much too high a value. Hilgenfeld, while availing himself of the various readings of the French and English manuscripts, has taken as the basis of his text the Vatican and another manuscript allied to it, belonging to the Dresden library, in which the *Pastor* was found between the Psalms and the Proverbs of Solomon. This manuscript also belongs to the fourteenth century.

It is needless to say that Hilgenfeld has done his work as an editor with great care and judgment, abstaining from making needless changes and indulging very sparingly in critical conjecture, but not fearing to return to the readings of the manuscripts where they have been altered into better Latin. Such words as *horripilatio* (Vis. iii. 1), which, however, was the reading of Faber, *tenebrabitur* (Mand. v. 1), altered into *obscurabitur*, or such a phrase as *sedit singularis* (Vis. i. 2), for *sola*, have a savour of barbarism which bespeak their genuineness. I cannot understand however why, in Vis. ii. 3, one of the passages on which Tischendorf relied to prove the text of Simonides to be a translation from the Latin, Hilgenfeld should give us *dices autem Magno: Ecce tribulatio*. If he relied upon the Greek it should of course be *Maximo*, but otherwise there seems to be no objection to the Vatican reading *magna ecce*, unless he preferred that of his own Dresden manuscript which gives *magna vere*. In other instances he makes a judicious use of the Greek. Thus for the vulgar *per quandam locum ad dexteram* (Vis. i. 1), where the Greek has δὲ ἀνοδίας τινός, he reads *per quandam locum desertum*. Again (Vis. i. 3), where the Vatican seems hopelessly corrupt, reading *Tamquam errarius producus domum opus suum opricum ei cui vult*, for which the *princeps editio*, omitting *domum*, has conjecturally, *exponit cui vult*, the Greek περιμένεται τοῦ πράγματος οὐ θέλει suggests the true reading *obtingit rei cui vult*, which moreover is confirmed by the reading of the old Parisian fragment, which has *obtinguit*. In some instances it may be that

Hilgenfeld has deferred too much to the Greek, but on the whole his text is no doubt as near an approach to the original form as we are ever likely to have. ROBERT B. DRUMMOND.

Contents of the Journals.

Zeitsch. f. wissenschaft. Theologie. Vol. xvi. No. 3.—The old and the new faith [Strauss and Lagarde]; by A. Hilgenfeld.—Thoughts on the Conscience, with reference to Gass' *Die Lehre vom Gewissen*.—On I Cor. xv. 20-28; by W. Grimm.—Philo and the received text of the LXX.; by C. Siegfried (continued).—The Epistle to Philemon, critically examined by H. Holtzmann. [Difficulties arising from its connexion with the Epistles to the Ephesians and Colossians].—Supplement to the essay on Josephus and Luke; by Max Krenkel. [Parallel passages confirmatory of Holtzmann's view that the author of the third Gospel and the Acts made use of Josephus].—Notices. Strack's *Prolegomena critica*; by Nöldeke.—Wittichen's *Die Idee des Reiches Gottes*; by A. H.—Weissenbach's *Der Wiederkunftsgedanke Jesu*; by A. H.—Ranke's *Curiositas evang. Lucani fragmenta Latina*; by H. Rönisch.—Hilgenfeld's *Hermas Pastor*; by H. Rönisch.—Works on the Florentine and Vatican Council; by A. H.

Theologische Tijdschrift. July.—An unsuccessful attempt to describe the religion of the ancient Aryans; by C. P. Tiele. [On Schoebel's *Recherches sur la race première de la race indo-iranienne*, a learned but thoroughly uncritical work].—The question of Immortality; by S. Hoekstra. [On Miss Cobbe's essay in the *Theological*].—The narrative of Paul's flight to Damascus; by J. H. A. Michelsen. [2 Cor. xi. 32, 33, xii. 1, 7a an interpolation.].—The year 1000; by J. H. Maronier. [Shows, after Dom François Plaine, that the supposed fear of the day of judgment in the year 1000 is purely imaginary.].—*The Book of Ardd-Viraf*; Lenormant's *La légende de Sémiramis*; and de Labarthe's *La science des religions comparées*; rev. by C. P. Tiele.—Fürst zu Solms on the theology of Rothe; the reprint of Kinker's work on Kant; Zöllner *Ueb. die Natur der Cometen* [appeal to scientific men on behalf of philosophical studies]; rev. by F. W. B. van Bell.

New Publications.

BRANDES, H. Die Königsreihen v. Juda u. Israel nach den biblischen Berichten u. den Keilinschriften. Leipzig: Diirr.
MALAN, S. C. Original Documents of the Coptic Church. Nutt.
OEHLER, Prof. Dr. G. F. Theologie d. alten Testaments. I Bd. Einleitung u. Mosaismus. Tübingen: Heckenhauer.
PFLEIDERER, O. Der Paulinismus. Ein Beitrag zur Geschichte der urchristl. Theologie. Leipzig: Fues.
STOCKMEYER, J. Die Structur d. ersten Johannesbriefes. Basel: Schneider.
VASCOTTI, R. P. Claro. Institutiones historiae ecclesiasticae novi foederis. Ed. tertia emendata et aucta novis curis Prof. Dr. Joannis Hrast. Görz: Sochar.

Physical Science.

A Catalogue of the Collection of Cambrian and Silurian Fossils contained in the Geological Museum of the University of Cambridge. By J. W. Salter. With a Preface by the Rev. Adam Sedgwick, Woodwardian Professor of Geology in the University of Cambridge; and a Table of Genera and Index added by Professor Morris. Cambridge: University Press.

IT IS THREEFOLD interest attaches to the volume before us. It is, as its title indicates, specially intended to be a reference-catalogue to the older palæozoic fossils in the Woodwardian Museum, the margin of each page being furnished with letters of reference corresponding with similar initials painted on the cases and drawers of the Museum.

But in addition to this primary function, it is of the highest value to geologists and palæontologists engaged in the investigation of the older rocks, on account of the lists of genera and species which it supplies, arranged in zoological order, yet divided into stratigraphical series. Each species is also furnished with authentic localities and illustrated by numerous woodcuts, which are at least of generic if not of specific value, in all cases. Several small but instructive sections are also given. Of great geological interest must likewise be reckoned the "Table showing the classification of the Lower Palæozoic Rocks," carefully drawn up by Professor Morris, who has also supplied a

summary of the contents, together with a "Table showing the range of the genera as indicated by this Catalogue."

Lastly, the *Catalogue* derives both a historical and biographical interest from the fact, that though the preface was dictated by Professor Sedgwick himself only four months before his death (when in his 87th year), yet it retains in a remarkable degree the clear, earnest, forcible style of eloquence for which his discourses before the University had long ago rendered him justly celebrated.

Prefaces were always peculiarly fascinating to Sedgwick; that which accompanies his *Synopsis of the Classification of the British Palæozoic Rocks*, published in 1851-5, extending to 106 pp. 4to. The present preface is only 33 pp. in length; in it he gives us the history of the commencement and completion of the *Catalogue*, involving the record of the sad story of poor Salter's failing health and death, and the reiteration of his own ailments—a favourite prelude to all his lectures, letters, and conversations for many years past. Passing from this we come naturally to the history of the gradual formation of the collection, and the sources from which it has mainly been derived. Considering how entirely Sedgwick devoted himself to the promotion of the interests of the University, and especially to the task of making the Woodwardian Museum under his care a really valuable and instructive repository, it is but a small share of credit which he claims when he says "the following catalogue of all the older palæozoic fossils in the Woodwardian Museum consists of specimens which have been collected by myself, or presented by my friends, or obtained by purchase during my very long tenure of office as Professor of Geology."

It is a fact that, when Sedgwick commenced to lecture, he had to collect the specimens as well as provide by his own geological labours in the field the maps and sections required to illustrate his discourses.

And here it may not be out of place to observe that prior to Sedgwick's election in 1818 the professorship seems to have become almost a sinecure, scarcely any lectures on geology having ever been given.

This chiefly arose from the singular nature of the formal duties of the Geological professor, who, according to the will of the founder, was specially appointed to the purpose of defending Dr. Woodward's views as to the nature and origin of fossils against the attacks of Dr. Camerarius of Tübingen, and his disciples or followers, an engagement to this effect being entered into by each professor on his being appointed to the chair. A sum of £10 annually had been specially left by Dr. Woodward to defray the expense of foreign correspondence and for the purchase of additional specimens; but Sedgwick's predecessors considered it wiser to devote the money to other purposes, so that, when he received the appointment, the collection of which he was put in charge consisted solely of the original cabinet of British and foreign fossils and minerals brought together in the seventeenth century by Dr. Woodward.

It is only justice to Prof. Sedgwick to state that from the first he set himself vigorously to work to remedy this deficiency, and that the £10 a year was not only spent, but was often supplemented by several hundreds of pounds besides, no small part of which was contributed by Sedgwick himself. Among the more important additions to the Museum may be mentioned Count Münster's collection, Mr. Image's Chalk fossils, Fletcher's Silurian Crinoids and Trilobites, and Leckenby's magnificent museum of Oolitic fossils, chiefly from Yorkshire, beside vast stores of specimens added from time to time from the Cambridge Greensand the Chalk and Tertiaries, principally by the personal labours of Mr. Henry Keeping, whose services

as keeper of the Museum have now for some years past been retained by the Syndicate of the University.

Sedgwick not unfrequently spent his entire vacation in geological explorations in Cumberland, Wales, Devon, or Cornwall, Scotland or Ireland, the Alps or Rhenish Provinces—sometimes in company with Murchison (who about this period (1825) had commenced his geological career)—often alone, or with the then youthful J. W. Salter in Wales, or his faithful henchman John Ruthven in his native dales of Yorkshire, or in Lancashire and Cumberland. Nor did he ever forget to collect materials for his geological museum in Cambridge, the promotion of which was a subject ever near his heart from first to last.

Sedgwick was the last man to undervalue the importance of having the collections under his charge carefully and well arranged in the manner best adapted to advance the study of geology in the University. With this view he secured the assistance of a succession of able coadjutors in the persons of Ansted, Jukes, Salter, McCoy, Barrett, and Seeley, under whose hands the treasures of the Museum were gradually brought into order, and in many cases described.

Thus the fine collections of palæozoic fossils gave origin to the *Descriptive Catalogue* of Prof. McCoy, published in 1851-55, and to the contributions to British palæontology of the same author; more recently again Mr. Seeley has published a catalogue of the Reptilia of the Secondary Strata, and a descriptive catalogue of the remains of Ornithosauria from the Cambridge Greensand founded on the specimens contained in the Museum; while the present catalogue by Mr. Salter was intended to form a supplement to McCoy's larger work.

It is natural to find that by far the larger share of Sedgwick's preface is taken up with a statement of the grounds upon which his original classification of the Cambrian rocks rests, and how it came to pass that the two fast friends, Murchison and Sedgwick, were estranged from each other, and how to this day the borders of the two great kingdoms of Cambria and Siluria remain a matter for controversy, which even the death of both their kings has not succeeded in bringing to a satisfactory conclusion. Professor Sedgwick writes as follows:—

"The stratigraphical system of nomenclature adopted in this Catalogue is essentially the same with that of Prof. McCoy's synopsis. It is based upon an actual survey, first made by myself, whereby I approximately determined in N. Wales the order of the older deposits of the whole region, and the natural groups of strata into which they might be separated.

"This might be called a great but rude problem of solid geometry, to be first solved by an elaborate examination of physical evidence, and without reference to the organic remains in the successive groups. But these groups being once established on the basis of true observation, we may then proceed to obtain the first chapters of a true history of the succession of organic types, as the tale is told in the successive strata whence they have been derived. And when we have once obtained in any extensive section a true succession of organic types, we may then, as Nature is true to her own workmanship, advance a step farther, and use that succession to help us in making out the order of the physical groups in cases where we have been imperfectly or obscurely elaborated. Thus we have two great principles of arrangement: first, by actual and laborious observation of the successive physical groups; secondly, by the order of the organic types which have been already established by a reference to the types of some well-known natural section.

"In determining a geological nomenclature these two great principles must never be lost sight of. No true nomenclature can be in conflict with the actual succession of the physical deposits; neither can it contradict the true succession of organic types. Nature does not contradict her own workmanship. This was the principle on which William Smith, whom we call the father of English geology, acted; and it was the principle on which Murchison acted when he first made known his beautiful succession in the upper part of (what he taught us to call) his Silurian system. That upper part of his system was thoroughly and beautifully worked out, and was accepted at once, and continues to maintain its place. But below the Wenlock shale, in what he called

the Lower Silurian groups, his fundamental sections utterly broke down, having no base to rest upon. He never made out the succession of his physical groups: some of them which required separation he confounded and some he put in an inverted order; and thereby he brought an inevitable incongruity into his lists of the Older Palæozoic fossils. In short, I venture to affirm that the Lower Silurian nomenclature, however widely adopted on the authority of its author, was false, because it was built upon sections that were untrue to nature; and if this assertion be true—and it is true—the discussion requires no farther argument.

"As a general rule honest truth and good taste go hand in hand; and what can be more incongruous and tasteless than to erase the classical name of Cambrian as applied to the grand mountain chains of Caernarvonshire and Merionethshire, and to substitute the word Silurian as their designation? This was done by the author of the 'Silurian system' in the first instance no doubt by mistake, and in the hope of giving a greater extent and firmer basis to his system. But when the great errors of his fundamental groups were discovered, why continue such a monstrous abuse of nomenclature? Siluria supplies us neither with the best types of the older groups, nor with any sections which clearly define their succession: Cambria supplies both. Our business here is not to consider what great service the author may have done in other regions, but to consider whether his work in Lower Siluria be true to nature. The first publication of his grand lists of 'Lower Silurian Fossils' was a great boon to geology; but the assumed stratigraphical arrangement and the grouping of the species has been a great mischief, and a drag upon its progress" (p. xiii. Introduction).

The subjoined Table by Prof. Morris, will serve to show the relative classification of the Lower Palæozoic Rocks according to

SEDGWICK (1872)		and	MURCHISON (1868).	
SILURIAN.	Ledbury Shales,			Passage Beds.
	Downton Sandstone, Bone Bed and Upper Ludlow.....			Tilestones and Upper Ludlow.
	Aymestry Limestone and			Aymestry Limestone
	Lower Ludlow			Lower Ludlow.
	Wenlock Group			Wenlock Limestone and Shale.
CAMBRIAN.	Lower Wenlock Group			Woolhope Limestone and Shale.
	May Hill Group			Upper Llandovery.
	Upper { Upper Bala Group			Lower Llandovery.
	{ Middle Bala Group			Caradoc & Bala Rocks
	{ Lower Bala Group			Upper and Lower Llandeilo Rocks.
	Arenig or Skiddaw Group			
	Mid. { Tremadoc Group			Lingula Flags or
	{ Ffestiniog Group			
	Menevian Group			PRIMORDIAL SILURIAN
Lower	{ Harlech Group			
	{ Longmynd, Bangor.....			
	and Llanberis Group...			CAMBRIAN.

The divisions adopted by Prof. Phillips (1855), by Prof. Jukes (1863), by the Survey (1863), by Sir Charles Lyell (1871), are also given by Prof. Morris. Each differs somewhat from the above in the greater divisions. Lyell makes the barrier between the Cambrian and Silurian at the top of the Tremadoc Group; Phillips, between the Arenig Group and the Llandeilo Flags, which is also the line of division adopted by the Geological Survey, although the beds are called by different names and their synonymy is not readily to be made out. Jukes calls the Middle and Upper Cambrian of Sedgwick "Lower or Cambro-Silurian."

One thing is very clear, that Murchison—although not justified by good evidences of unconformity in the strata and of a break in time and in the succession of the rocks, and a change in conditions, both lithological and palæontological—carried the day with the public, stealing a march on his old friend's boundary-line; at first, as Sedgwick intimates, by issuing a small map in the atlas published by the Society for the Diffusion of Useful

Knowledge (in 1843), "in which he (Murchison) had brushed out of sight, under a deep Silurian colour, every trace of my previous work in North Wales" (p. xxvi), and afterwards by a bold assumption of right of priority, which he ever after maintained. Of his treatment by the council of the Geological Society—(then, it is to be feared, entirely led by Murchison and completely under his control)—Sedgwick cannot evidently bring himself to speak in any measured terms. Writing of the way in which his papers were tampered with by Mr. Warburton, who totally refused him the sight of any single proof-sheet, though he applied to him again and again with increased energy after his repeated refusals, he says:—"It is no easy matter to explain an overbearing treatment such as I have described; but I believe Mr. Warburton undertook his task for the express purpose of bringing my papers into harmony with Murchison's scheme of covering all the older rocks of North and South Wales with Silurian colours. For in his Reduction (of Sedgwick's maps and sections) he again and again contrived to change my language, and make me write in a new Silurian tongue. Was this fair and honest dealing with me?" (p. xxvii.)

All through his life Sedgwick retained much of the honest, frank simplicity of manner so characteristic of the hardy dalesmen of his native county. There was a singular blending of almost womanly tenderness and affection in his nature, with a stern, uncompromising love of truth, and a healthy and hearty aversion for whatever was unjust or mean.

Thus, whilst he keenly regretted to the last his loss of Murchison's friendship—more so perhaps even than the usurpation by another of the labours of so many years of good, sound, honest geological work—yet he could never recover from the sense of unfair treatment which he felt he had so little merited either from his friend Sir Roderick or from the Geological Society; and it painfully influenced his later years, causing him to hold aloof from the geological world outside his University.

One curious and very striking result presents itself to our minds in studying Prof. Morris's summary of life-forms—namely, how very far, after all, our earliest palæozoic records must be from reaching back to that dim and distant period when life began on our earth.

It is true there is a marked difference in the relative proportions of genera even between the Cambrian and Silurian epochs, and again between the Upper and Lower Cambrian; but roughly speaking—besides plant-remains—we have representatives of *six great groups* of Invertebrata even in the Cambrian rocks. The following will show the relative number of genera in the two divisions:—

	Cambrian.	Silurian.
Plants.....	1	4
Protozoa.....	7	7
Hydrozoa.....	11	2
Actinozoa.....	9	24
Echinodermata.....	4	26
Annelida.....	13	7
Crustacea.....	40	21
Pryozoa.....	2	6
Brachiopoda.....	17	19
Lamellibranchiata.....	8	19
Gasteropoda.....	9	13
Heteropoda.....	2	1
Pteropoda.....	5	4
Cephalopoda.....	4	6

It is only when we reach the Downton sandstone and the Ledbury shales, the uppermost Silurian strata, that we meet with any evidence of the first known fishes *Onchus* and *Pteraspis*.

In the one group, that of the Crustacea, which appears to

be richer in genera in the Cambrian than in the Silurian, this results, in great measure, no doubt, from the recent large accessions of new genera peculiar to older rocks of late determined by Messrs. Salter and Hicks, some of which, however, may prove not to be distinct when better materials are obtained.

The Crustacea and the Cephalopoda doubtless occupied the highest places in the animal kingdom in these early times, and their functions were as important in the Cambrian and Silurian periods as that of the Fishes and Reptilia among the vertebrata of later periods and at the present day. They were the redacious types of animals whose office it was to devour not only the dead and dying, but also the surplus progeny of the palæozoic seas—a task which, from their abundance and the large size of some of their number, they were doubtless well able to perform.

Altogether the *Catalogue* enumerates about 910 named species, but many other forms are noticed, together with their localities, to which specific names are not assigned.

Much remains to be accomplished before it is possible to generalize with any degree of certainty upon this interesting question of the earliest appearance of each zoological group in time. But every such catalogue as the one before us is a step in the right direction, and our best thanks are due to the Syndics of the University Press, and especially to the Vice-Chancellor, Dr. Cookson, for the excellent manner in which it has been brought out.

HENRY WOODWARD.

Notes on Scientific Work.

Geology.

Fossils from the Phosphate Beds of Quercy.—M. P. Gervais communicates to the French Academy of Sciences (*Comptes Rendus*, vol. 77, p. 106) some notes on the fossil remains from the phosphate beds of Quercy, which he has met with in his examination of various collections made in that locality. That of M. Daudibertièrre, remarkable for the number and good preservation of its specimens, contains some fine examples of *Palæotherium* analogous to those occurring in the Paris gypsum beds, and some remains of *Rhinoceros minutus* and *Acerotherium*. There are also some teeth of a mammal related to *Rhinoceros*, but differing from that genus in some essential characters. M. Gervais therefore proposes a new genus for its reception which he designates *Cadurcotherium*, and the species *Cad. Cayluxi*, from Caylux whence it was obtained; the animal was of greater height than *Rhinoceros* or *Acerotherium*. The teeth consist of the last upper molar and several lower molars; the upper being larger and narrower than that of rhinoceros. Its external face is slightly convex and the hollowing of its crown is narrow and elongated. The lower molars are smaller than in *Rhinoceros*, with collines much more oblique and less projecting; their external face is undivided and has but a slight curvature. The porcine remains from these beds consist of *Anthracootherium*, *Anoplotherium*, *Entelodon*, *Hyootherium*, *Cainotherium*, and a small animal allied to the latter, which possesses a well marked bar between the first and second false upper molars. The ruminants consist of *Amphitragulus* and a species of *Cervus*. There are many species of *Ilyenodon*, also *Cricetodon* and *Archæomys*, whilst *Peratherium*, *Aves*, terrestrial *Chelonians*, a species of *Crocodile*, *Lacertians*, and *Serpents* are all represented.

The Corundum of North Carolina and Georgia.—Dr. Lawrence Smith, who discovered emery at Gumuch-dagh, near Ephesus, and in the Grecian Archipelago in 1846-7, gives some particulars (*Comptes Rendus*, vol. 77, p. 356) of the mode of occurrence of that which has been found in great abundance during the last few years in North Carolina and Georgia. The corundum occurs in serpentine or a chrysolite rock constituting a system of veins extending over a distance of 100 miles. This system is developed on the north-west side of the Blue Mountains, and runs parallel to the principal chain at a mean distance of about ten miles from the summit, describing however a very considerable curve inwards near the source of the Little Tennessee river. For a distance of about 130 miles, extending from Mitchell Co. to Macon Co., the serpentine veins are enclosed in a hard crystalline gneiss which contains red garnet, kyanite, and pyrites. From the bend at Little Tennessee river it passes into a hornblende gneiss. At Buck's Creek and thence towards the south-west the orthoclase felspar of this rock is replaced by albite, forming an albitic syenite. With the serpentine are found chalcodony, talc, steatite, anthophyllite, tourmaline, emerylite, zoisite, albite, asbestos, actinolite, tremolite, and sometimes chromite and epidote, the corundum

being mostly associated with ripidolite (clinocllore), with the exception of the red variety which occurs in the zoisite. This serpentine or chrysolite rock is invariably the gangue of the corundum in N. Carolina and Georgia, whilst in Asia Minor the enclosing rock is crystalline limestone. Dr. L. Smith points out however that although each locality possesses its own peculiar characters the contiguous rocks in each case are of the same geological age, and are both geologically identical with those found associated with the emery of Chester, Massachusetts.

The Tertiary Deposits of Southern Italy.—T. Fuchs describes (*Sitzungsberichte der Akad. der Wiss., Wien*, vol. 66 (1), p. 7) the results of his studies of the tertiary formation in the vicinity of Messina and Gerace in Southern Italy, which have been dealt with in numerous papers and memoirs by Prof. Seguenza and others. The author's attention was chiefly directed to the beds named by Prof. Seguenza the "Zancleén" and "Astien," the former including the white marl and coral limestone, the latter embracing the br ozoa limestone and a fine yellow sand. Fuchs' examination of these divisions leads him to the view that the "Zancleén" is not a distinctive deposit holding an intermediate position between the miocene and pliocene as regarded by Seguenza, but is true pliocene, and that both the "Astien" and "Zancleén" belong to the same geological epoch. He points out that the white marl which is often interbedded with the coral limestone is a deep sea deposit, as shown by the fossils it contains, the great bulk of these consisting of foraminifera such as *Globigerina* and *Orbulina*. These are present in such numbers that the rock might well be regarded as having at one time been *Globigerina* or *Orbulina* mud. It is in fact as typical a deep water deposit as the white chalk to which it bears a great petrographic resemblance. On the other hand the bryozoa limestone is rich in Balani, Pectens, Echinidae, and other well-known shallow water forms. Fuchs believes these two divisions to be of contemporaneous origin, and in fact to be but the same deposit under different conditions, the "Astien" being the strand formation, and the "Zancleén" the deep sea deposit.

Physiology.

Vaso-motor Action of the Lingual and Hypoglossal Nerves.

—Prof. Vulpian in a paper read before the *Société de Biologie* states that hyperæmia and dilatation of the vessels occur after section either of the lingual of the fifth or of the hypoglossal nerve on the same side of the tongue; the venous blood at the same time becomes of a bright red colour. During electrical excitation of the peripheric extremity of the hypoglossal nerve, the hyperæmia diminishes and the corresponding half of the tongue becomes pale, but electrical excitation of the peripheric extremity of the fifth increases all the appearances of hyperæmia. Thus it would appear that both nerves contain nerves capable of causing dilatation and contraction of vessels: in the hypoglossal nerve the latter preponderate and in the lingualis the former. M. Vulpian has also made some experiments in regard to the splanchnic nerve and finds that if in curarized dogs the splanchnic nerve be divided three centim. above the left suprarenal-body the size and blood contents of the corresponding kidney are increased. The quantity of urine secreted is augmented; it becomes albuminous, but contains no epithelial cells of the tubuli or blood. On exciting the peripheric extremity of the nerves with induced electrical currents the kidney becomes pale, the veins contract, and the secretion ceases.

The Functions of the Eustachian Tube.—An essay on this subject has been published by Dr. T. F. Rumbold, of St. Louis, and a good résumé of the whole work is given in the *London Medical Record*, July 23rd, 1873. Dr. Rumbold endeavours to show: 1. That during the act of deglutition the eustachian tube is not an open passage into the tympanum. 2. That the walls of the eustachian tube are constantly in slight contact. 3. That the air continually permeates the eustachian tube into the tympanum, thus maintaining the normal air density in this cavity. 4. That the air in the normal tympanic cavity is not of equal density with that of the surrounding atmosphere, the air in the tympanum being rarefied. 5. That one of the functions of the eustachian tube is the maintenance of this normal air density. 6. That the rarefied condition of the air in the tympanum is the cause of the uniform concavity of the membrana tympani, especially that portion of it from which the "light spot" is reflected.

Elimination of Salts of Mercury in Man.—M. Byasson has performed a series of highly interesting experiments in order to determine the time it takes for a soluble mercurial salt introduced into the stomach to be detected in the urine, saliva, and sweat, and has communicated his results to Robin's *Journal d'Anatomie et de Physiologie*. He finds: 1. That mercuric bichloride taken into the stomach may be found in the urine about two hours after its ingestion. 2. It takes four hours to be found in the saliva. 3. It is not possible to detect its presence in the sweat. 4. Twenty-four hours after the ingestion of moderate doses of the salt its elimination may be considered to be achieved. 5. A part of it is to be found in the fecal matter.

The Peristaltic Movements of the Intestines.—J. P. Hougkeest van Braam (*Pflüger's Archiv*, 1873, H. vi.) has adopted Sander's method of observing the peristaltic movements of the intestines, which

consists in plunging the animal in a solution of 6-10ths per cent. of common salt at the temperature of the body and opening the abdomen beneath the surface. He has arrived at the conclusion that the pneumogastric nerve is the motor nerve of the stomach but can call forth no movements in the small intestine. Where movements of the intestine appear to have been caused by excitation of the vagus it is due, he believes, to the propulsion of part of the contents of the stomach into the intestine. The vagus has no influence upon the large intestine nor upon the uterus. The splanchnic nerves are the vaso-motor nerves of the intestine, and they constitute at the same time inhibitory nerves for the intestinal movements and for the movements of the stomach. The movements of the intestine are in a higher degree dependent on the nature of the blood and the fullness of the blood-vessels. Under normal conditions local excitations are not propagated from one point to another and cause no peristaltic movements. Antiperistaltic movements never occur under normal conditions.

On the Pressure in the Pericardium.—Dr. Adam Kiewicz and H. Jacobson observe (*Centralblatt*, 1873, No. 31) that the pressure on the external surface of the heart has never yet been measured. Carson and Donders admit that it is equal to the pressure in the pleural cavity, which last they attempted without much success to estimate indirectly. Drs. K. and J. introduced a trocar through the fourth intercostal space having a tightly fitting stilet, which was then withdrawn to a point beyond that at which a manometer was connected with the interior of the canula. The withdrawal of the stilet of course left a vacuum, but that was allowed for in accordance with the result of previous experiments. They found that the pressure on the surface of the heart was always negative in sheep, dogs, and rabbits. The amount of negative pressure varied from -3 to -5 mm. of mercury. Hence it appears that the force with which venous blood is sucked towards the heart is considerably less than has generally been admitted. Donders estimates it in the pause of respiration at $7\frac{1}{2}$ mm. of mercury, after an ordinary inspiration at about 9, and with a very deep inspiration at 30 mm. The authors in their experiments find it to be about one half the above numbers.

The Life History of a Cercomonad.—In the last part of the *Monthly Microscopical Review* (lvi.) Mr. Dallinger and Dr. Drysdale give interesting details of some protracted observations they have recently conducted on a cercomonad, and which have an important bearing on the controversy respecting spontaneous generation. They used various microscopic powers and continuously examined during sometimes as long a period as fourteen days a peculiar monad, hitherto undescribed, but which is under some circumstances developed in enormous quantities in the fluid resulting from the maceration of the head of the cod. This form passes through a remarkable series of changes, each of which might be taken for a distinct and independent creation were not its evolution perfectly regular. Whilst working on this they observed a second form which possessed only one flagellum instead of two. When mature of this form multiplies by fission for a period extending from two to eight days it becomes peculiarly amœboid, two individuals coalesce, slowly increase in size and become a tightly distended cyst. The cyst bursts, and incalculable hosts of immeasurably small sporules are poured out as if in a viscid fluid and densely packed; these are scattered, slowly enlarge, acquire flagella, become active, attain rapidly the parent form, and once more increase by fission. Experiments were next made to determine the influence of heat. An ordinary slide containing adult forms and sporules covered in the ordinary way was in seven several cases allowed to evaporate slowly and placed in a dry heat which was raised to 121°C (250°F). It was then slowly cooled and distilled water was taken up by capillary attraction. On examination all the adult forms were absolutely destroyed and no spore could be definitely identified. After being kept moist in the growing stage for some hours and watched with the 1-50th gelatinous points were seen in two out of the seven cases, which were recognised as exactly like an early stage of the developing sporule, and by careful watching these were observed to attain the small flagellate state.

New Publications.

- BALTZER, A. Der Glärnisch. Ein Problem alpinen Gebirgsbaues. Zürich: Schabelitz.
 BRANDT, J. F. Untersuchungen über die fossilen und subfossilen Cetaceen Europas. St. Petersburg.
 CHERBULIEZ, E. Ueber einige physikalische Arbeiten Eulers. Ein Beitrag zur Geschichte der physical. Theorien im 18ten Jahrhundert. Bern: Huber.
 DI GIOVANNI, V. Storia della filosofia in Sicilia da' tempi antichi al secolo xix. Vol. I. Filosofia antica, scolastica, moderna. Palermo: Lauriel.
 DALTON, Col. E. T. Descriptive Ethnology of Bengal. Thacker.
 DE MACEDO, J. M. Geographische Beschreibung Brasiliens. Uebersetzt von M. P. Alves Nogueira und W. T. von Schieffer. Leipzig: Brockhaus.

- DYORÁK, V. Zur Theorie der Talbot'schen Streifen. Wien: Gerold's Sohn.
- FAUCONNET, C. Excursions botaniques dans le Bas-Valais. Basel: Georg.
- GAMBÈRA, P. Di Galileo Galilei considerato come fondatore del metodo sperimentale e precursore della moderna teoria dinamica. Novara: Miglio.
- GEIGENBAUER, L. Note über bestimmte Integrale. Wien: Gerold's Sohn.
- GRESSLER, F.G.L. Himmel und Erde. Langensalza: Schulbuchh.
- GUERRIER, W. Leibnitz in seinen Beziehungen zu Russland und Peter dem Grossen. St. Petersburg.
- HIERONYMUS, G. Beiträge zur Kenntniss der Centrolepidaceen. Halle: Schmidt.
- KOLBE, J. Beweis eines Satzes über das Vorkommen complexer Wurzeln in einer algebraischen Gleichung. Wien: Gerold's Sohn.
- LAURENCIN, P. L'Étincelle électrique, son histoire et ses applications. Abbeville: Briez.
- MAYNARD, C. J. The Birds of Florida. Part II. Salem (Mass.).
- NEUMANN, C. Ueber die den Kräften elektro-dynamischen Ursprungs zuzuschreibenden Elementargesetze. Leipzig: Hirzel.
- NOVAKOVITZ, S. Physiologie der Stimme und der Laute. (In Serbischer Sprache.) Belgrad.
- OERSTED, A. S. Systeme der Pilze, Lichenen und Algen. Leipzig: Engelmann.
- QUENSTEDT, A. Grundriss der bestimmenden und rechnenden Krystallographie. Tübingen: Laupp.
- RAMES, J. B. Géogénie du Cautal. Paris: Savy.
- ROSE, G. Elemente der Krystallographie. 3^e Aufl. neu bearb. von A. Sadebeck. Berlin: Mittler und Sohn.
- SCHLEIDEN, M. J. Die Rose. Leipzig: Engelmann.
- STOLICZKA, F. The Brachiopoda of the Cretaceous Rocks of Southern India. Trübner.
- STOLICZKA, F. The Ciliopoda of the Cretaceous Rocks of Southern India. Part II. Trübner.
- WESSELY, J. Der europäische Flugsand und seine Kultur. Wien: Faesy und Frick.
- WEYR, E. Ueber rationale ebene Curven vierter Ordnung deren Doppelpunkstangenten Inflectionstangenten sind. Wien: Gerold's Sohn.
- WINCKLER, A. Integration der linearen Differentialgleichung zweiter Ordnung, deren Coefficienten lineare Functionen der unabhängigen Veränderlichen sind. Wien: Gerold's Sohn.
- ZIRKEL, F. Die microscopische Beschaffenheit der Mineralien und Gesteine. Leipzig: Engelmann.

History.

Councils and Ecclesiastical Documents relating to Great Britain and Ireland. Edited, after Spelman and Wilkins, by A. W. Haddan and W. Stubbs. Vol. 2, part 1. Clarendon Press.

THIS volume completes the account of the Celtic churches in Great Britain, Ireland being reserved for the second part. It contains all that is known about the church of Cumbria or Strathclyde (A.D. 600-1188); the British churches abroad, viz. in Armorica (387-818) and at Bretoña in Galicia (569-830); and the church of Scotland until declared independent of the see of York (400-1188).

The Celtic church suffered a destiny as hard as that of the Celtic State. Their missionaries converted Scotland, and North and Central England, only to see the result of their labours appropriated by the ever encroaching power of Rome. Their missions to the continent shared a nearly similar fate. The Papacy gave Scotland to the see of York, Wales to that of Canterbury, Brittany to that of Tours; a stroke of the pen handed over Ireland to the Anglo-Norman church. The Scoto-Irish schools had trained a series of great men, and able scholars such as John Scotus Erigena, men who had the widest intellectual range during those ages: but the Danish invasions destroyed these schools, and with them the very means of future instruction. An element of intellectual activity which might have been of the greatest importance was thus lost to the Western world; and an independent organization destroyed which might have held its own against the growing autocracy of Rome. A large part of the materials for its history has consequently perished,

though the Celtic MSS. of S. Gallen and other monasteries abroad are still of the greatest value.

The pressure of the English and Norman races on the Celts not only displaced their tribes but their traditions, and the history of their saints has consequently been in some cases as it were relocalised. As the population was forced on into Wales and Cornwall, a series of emigrations naturally took place to the coast of Armorica, which thus got the name of Brittany. These tribes had always lent a helping hand to each other across the Channel; Cæsar found that the Veneti were strongly reinforced by their British allies from the opposite shore. Following the earlier colony (that of Maximus' soldiers in 387), fresh emigrants passed over in 450 and 512 and 561, all of them Christian Britons—though we have traces of paganism still in Cornwall and at Vannes and Leon. It is possible that the great calamities they suffered from the Anglo-Saxons and from pestilence may have impressed many others as well as Gildas, who has left us his Lament "De Excidio Britanniae," and who was himself one of the emigrants. At any rate there seems to have been a revival of religious feeling after the disastrous war. S. David reorganised discipline in Wales, and S. Samson and S. Paul (S. Pol de Leon) came from Cornwall to Dol and Leon respectively to preach to the emigrants. Not only were the local names Cornugallia and Domnonia transferred, but there is a considerable correspondence of names of all kinds on the two coasts, S. Brieuc, S. Budoc, Landevenech, and the like. In fact the intercourse between South Wales, Cornwall, and Brittany must have been very close throughout the sixth century. Oudoceus son of Budic came from Cornwall to Armorica to be prince of that country. And the Litany printed at p. 81, probably of the tenth century, might just as well be Cornish as Breton, if we look at the names of the saints commemorated in it (very different from the Scotch list in p. 279), Samson, Brioc, Melorus (Cornish, not Breton), Guinwaloe, Corentinus, Paul, Guoidwale, &c.—especially as it prays for the "plebs et clerus Anglorum" as well as for "rex et episcopus," since the Cornish, as well as the Breton church, was now leaning for protection on the Anglo-Saxon kings, as we see from the "Bodmin Gospels" in the British Museum. The wild shores of Cornwall were a favourite resort of the Welsh and Irish devotees, though the wildness which attracted them had no charm for the Anglo-Saxons, as we see by the complaint of Aldhelm's pupil Æthelwald (writing before 706, Jaffé 3, 38):

"Sicut pridem pepigeram—quando profectus fueram
Usque diram Domnoniam—per carentem Cornubiam
Florulentis cespitibus—et foecundis graminibus."

Perhaps Æthelwald was taking Aldhelm's letter to Gerontius, written to persuade the Celtic church to adopt the Roman date of celebrating Easter. The variance had only arisen from a different mode of calculating the right time, and the wonder rather is that any agreement could be ultimately come to at all than that there should have been disputes. On the other question, that of the tonsure, Aldhelm of course quotes the great religious romance of the Clementines, which the ecclesiastics had adopted from a most heretical source. How late the devotees persisted in betaking themselves to the desolate Cornish shores is clear from the Anglo-Saxon Chronicle a. 892, where mention is made of three Scots drifting in a boat from Ireland to Cornwall for the love of the pilgrimage. The somewhat restless activity of the Celtic missionaries is noted by Gildas, "transnavigare maria terrasque spatiosas transmare non tam piget [Britannos sacerdotes] quam delectat;" and there was then no difficulty of language, for Giraldus Cambrensis notes as late as A.D. 1215 that the Cornish and Bretons spoke nearly the same tongue, intelligible to most of the Welsh also—except perhaps in

the north. Our editors have noted yet another British church abroad, at Bretoña in Galicia, but it was destroyed by the Moors. There has been always a sort of connexion between North Spain and the Celts of Great Britain and Ireland, and Spain had acknowledged the British Emperor Constantine (as it had Maximus before him); and Constantine had put his son Constans in possession of the country. The run across from Corunna to Falmouth is very easy and was the favourite passage for ambassadors in the Middle Ages; Cæsar already notices that "one side of Britain looks towards Spain" (v. 12), and Milton summing up a mediæval legend speaks of S. Michael's Mount,

"Where the great Vision of the guarded Mount
Looks towards Namancos and Bayona's hold."

In fact we must practically regard all these Celtic districts as for a considerable period almost forming one body or confederacy, linked very closely by their ecclesiastical usages, which they were maintaining in conscious opposition to Rome; and in possession of nearly the same poetic traditions and legends (Paulin Paris derives even Nennius from Brittany). In Brittany, though there had been an early connexion with S. Martin of Tours, the Apostle of Gaul (he was similarly revered in Cornwall and Wales), yet the Roman see of Tours, as organized under the Frankish rule, endeavoured for a long time in vain to establish a supremacy over Dol. The missionaries from Tours evidently could not penetrate the forest of Brékilien, and their Christianising efforts were practically confined to the dioceses of Rennes and Nantes, and probably the south of Vannes. But the British emigrants had planted the whole coast, and even penetrated into the heart of the forest at S. Méen; a story in Hoveden ii. 136 shows a kind of connection still between this monastery and that of Bodmin in Cornwall as late as 1177. Ultimately of course the steady pressure of the Papal and French powers won the day, and Dol and Brittany equally lost their independence. The struggle is curiously like that of S. David's against Canterbury, as told in Giraldus Cambrensis, who fought it out in his own person. The diocese of Whitherne (Candida Casa) in Strathclyde similarly had to submit, and Iona lost its hold over Scotland.

The latter part of the volume contains a critically sifted account of the break up of the great kingdom of Northumbria, part of which fell to Scotland and part to England. Hence of course arose claims and counter-claims in endless variety, and our antiquaries still fight out an internecine war on the subject. The archbishopric of York has not had a successful history. Pope Gregory meant it and London to have shared the island between them equally, York having all up to the very north of Scotland. But Canterbury rose in importance with the rise of the southern capital, and the Scottish kings naturally wished to have their church independent of all English influence, and ultimately succeeded in their purpose. The Lothians had once been purely English, and even Fordun describes Stirling as a "locus marchialis, Scotiam et Britanniam intermedians sive connectens," and the bridge there over the Forth as "inter Britanniam et Scotiam, utriusque marginem apprehendens." But York in vain made efforts to keep up lines of bishops in the Orkneys and at Whitherne and at Glasgow; the Popes ultimately declared the Scottish bishoprics dependent on no one, save immediately on the Apostolic See. When the kingdom became independent, it was impossible to keep the national church dependent on England; the question no longer rested on disputed documents. The early history of the church of Scotland during the Celtic period is treated with great care, but in Pictish history a probable guess is all that is possible. The Irish Scots were already Christians when they settled in

Argyllshire, and S. Columba and his missionaries from Iona evangelized the northern Picts as vigorously and successfully as their successors did the people of Northumbria, and Mercia and Essex. The account of the Culdees in appendix B is admirably done, the ground having been once for all cleared by Dr. Reeves. These foundations, perhaps beginning about 800, in time followed a like course of deterioration with the similar Irish and with the Celtic Welsh monasteries; and partly by their own decadence, but perhaps more through English ecclesiastical influence (which began with Malcolm and Margaret, and culminated under King David), they, with the other monasteries of an Irish type, were either transformed or destroyed by a revolution beginning about the middle of the twelfth century, being principally converted into the monastic order nearest akin to them, viz. Augustinian canons; by the middle of the fourteenth century they had disappeared altogether, even in name. The old view of them may be seen in its best form in Campbell's poem of Aodh and Reullura. Nearly all the Scotch missionaries on the continent came from Ireland, the only one perhaps from Scotland itself being S. Cadroe, Abbot of Metz, who died about 978.

Among the collections printed in this volume some of the most curious are the Canons of Adamnan (p. 111), which mostly relate to unclean meats, and afford a valuable specimen of the way in which the early missionaries tried to adopt certain Biblical precepts to a barbarous mode of life. The first one runs thus:—"Marina animalia ad littora cadentia, quorum mortes nescimus, sumenda sunt sana fide, nisi sint putrida." In p. 119 is the Rule of S. Columba (probably compiled after his death), which is very striking. Part of it seems to be arranged by threes, e.g. "Take not of food till thou art hungry, Sleep not till thou feellest desire, Speak not except on business."

This first part of the second volume has been published separately, as the death of the lamented editor, Mr. Haddan, by which the whole church of England suffers a severe loss, has prevented the completion of the part relating to Ireland. But the work already done has been done once for all; the early evidence will not need another such critical and conscientious examination as Mr. Haddan has devoted to the records of the early Celtic churches of Great Britain.

C. W. BOASE.

Intelligence.

It is known that the victor in one or more of the principal contests at Olympia was entitled to have a statue erected there in his honour at his own expense or at that of his friends or townsmen. In the case of a victory in the horse or chariot races, the memorial would of course take the form of a chariot group or an equestrian figure. To maintain the local pride in a success of this kind, whether at Olympia or at any of the other national Greek games, various measures were taken, and among them that of striking a coin bearing an obvious illustration of the event, as is attested by the two instances of Anaxilaos, the tyrant of Rhegium, and Philip of Macedon, the father of Alexander the Great. This method of commemorating a victory at the national games has been lately brought into prominence by a paper *On the coins of Kamarina*, in Sicily, contributed to the *Transactions of the Royal Society of Literature*, N.S., x., Pt. iii., by Mr. R. S. Poole, the Keeper of Coins and Medals in the British Museum. After showing, without room for doubt, that the coins of Kamarina with the figure of a quadriga driven by Pallas, towards whom a Nike reaches a wreath, must have been struck at the time when Psaumis of that town gained the chariot victory celebrated by Pindar in the fourth Olympian Ode, Mr. Poole proceeds to compare the other coins of Sicily, on which agonistic types occur, with the recorded facts as to victories gained by citizens or rulers of these towns. The result is full of interest, and may be taken as opening up a question the pursuit of which must be largely to the advantage of the history of Greek art. Another question of the same class, the comparison of types on coins with the existing descriptions of celebrated statues, deserves more attention than appears to have been bestowed on it hitherto by numismatists. Meantime it may be worth while to point out that Alcibiades

is said to have commemorated his victories at the national games by two paintings, in one of which he was represented in the act of being crowned by Olympia and Pythia, not it should be observed by Nike. With this analogy it is possible to conceive that the winged female figure represented on the Sicilian coins as in the act of reaching a crown towards the charioteer, may be a personification of Olympia or one of the other localities where national games were held. As regards the amphorae on the coins of Kamarina, it may be, as Mr. Poole suggests, that such vessels filled with sacred oil were given as rewards to the victors. This was the case at the Panathenaic games, but as yet we have no evidence of such a proceeding at Olympia. At the same time, and in the absence of proof to the contrary, it is quite possible that second and third prizes consisted of substantial rewards of this kind.

At the annual meeting of the British Archaeological Institute, lately held at Exeter, Dr. E. A. Freeman read a valuable paper on "The Place of Exeter in English History," which was reported in several journals. We take our account of it from *Nature*, Aug. 7. Dr. Freeman had already sketched the history of the place in the fourth volume of his *Norman Conquest*; he now traced its growth from an original Celtic hill-fort into a Roman city, which had lived on through the Teutonic Conquest, and which still, after all changes, kept its place as the undoubted head of its own district. In Wessex such a history is unique; the continuity of its being is more perfect than that of most of the cities of Northern Gaul. He said that he could not answer his own first question, "When did the Celtic and Roman city first become a West-Saxon possession?" The first undoubted mention of it was in the days of Alfred, but it did not become wholly English in blood and speech until two centuries later. In Athelstan's day the city was still partly Welsh, partly English, each forming a city within a city. Athelstan drove out the British inhabitants and fortified the place by a wall. Dr. Freeman then traced the course of events through the Danish and Norman times. By the Norman Conquest it was settled for Exeter that she was to be an English city, not a separate commonwealth like the independent cities of Germany.

The view that Exeter, and Devonshire in general, were mainly Celtic until Athelstan's time has since been controverted in the *Pall Mall Gazette* by a writer who thinks little stress can be laid on the somewhat late account of Athelstan's proceedings given by William of Malmesbury, and that Devonshire became English much earlier. There are some grounds for this view. The Cornish parishes still retain the names of Celtic saints; in Devonshire there are very few traces of Celtic names; the Tamar is the Celtic boundary. In fact the Celts of Cornwall (not of Devon) helped the Danes against the English, and Egbert's victory over them was at Hingston Down, west of the Tamar. Athelstan, who conquered Cornwall, is traditionally connected with the conventual foundations at S. Germans, Bodmin, and Burian. There is no need to deny that there was a Celtic quarter in Exeter in Athelstan's time. Some of the parishes still show Celtic names, e.g. S. Petrock, and in a paper read at the Institute Mr. Kerslake tried to ascertain what parts of the city were occupied by the Celts and Teutons respectively—Dr. Freeman said that Mr. Kerslake had cleared up some of his difficulties about the walls—a good instance of the way in which the historian and the local antiquary may help each other. There are other grounds also for thinking that the English occupied Devon at an early time. If the Adescanaster where S. Boniface received his education was Exeter, there must have been already an English monastery there. We trust that Dr. Freeman, having taken up this interesting subject, will now work it out in a thorough manner.

We have received an excellent number of the *Cape Monthly Magazine* (April, 1872), which shows that our people at Cape Town take an interest in old English history. It contains an article by Dr. W. H. I. Bleek on "The Graham MS. Chronicles of England." The Mr. Graham to whom the MS. belongs represents, we believe, the Grahams of Fintry. The history of the MS. itself would be valuable, and Mr. Graham should give it himself. The first part seems to be an abridged form of the well-known chronicle, the *Brut*; the latter contains a series of small treatises, the chief value of which consists in the full-length miniature portraits of the Conqueror and the ten following kings, painted in the middle of the fourteenth century. The portraits of Edward III., the Black Prince, and Richard II., by a contemporary hand, are most likely faithful likenesses. On fol. 47 is a document in Anglo-Saxon which would be worth copying. It is not improbable that the volume once belonged to James I., but we should like to know more of its history. Dr. Bleek has given a few lines from the beginning and end of each piece which will assist in their identification.

New Publications.

- BALAN, Prof. P. Storia di Gregorio IXe dei suoi tempi. Fasc. 15-16. Modena: Tip. del Commercio.
 BAUCH, G. Ueber die Historia romana d. Paulus Diaconus. Eine Quellenuntersuchg. Göttingen: Peppmüller.
 BIBLIOTHECA rerum germanicarum. Tom. VI. Monumenta Alcuiniana a Ph. Jaffeo praeeparata. Ediderunt Wattenbach et Duemmler. Berlin: Weidmann.

- CARAVEN-CACHIN, A. Sépultologie française. Sépultures gauloises, romaines, et franques du Tarn; suivies de la carte archéologique de cette contrée aux époques antéhistoriques gauloises, romaines, et franques. Castres: Huc.
 CHABAS, F. Recherches pour servir à l'histoire de la xix^e dynastie et spécialement à celle des temps de l'Exode. Paris: Maisonneuve.
 DABIS, W. Abriss der römischen u. christlichen Zeitrechnung. Berlin: Calvary.
 DESJARDINS, A. États-Généraux (1355-1614), leur influence sur le gouvernement et la législation. Paris: Durand et Pedone Lauriel.
 EMLER, Dr. T. Regesta Diplomatica necon epistolaria Bohemiae et Moraviae. Pars II. Annorum 1253-1310. Vol. III. Prag: Grégr und Dattel.
 GROTANELLI, L. La Maremma toscana. Studi storici ed economici. Siena: Gatti.
 GUILHERMY, F. DE. Inscriptions de la France du cinquième siècle au dix-huitième. Tome I. Ancien diocèse de Paris. Paris: Imp. Nat.
 HAUTCOEUR, l'Abbé E. Cartulaire de l'abbaye de Flines. T. I. Paris: Dumoulin.
 RABAUD. Histoire du protestantisme dans l'Albigeois et le Lauragais. Paris: Sandoz et Fischbacher.
 RITTER, M. Geschichte der deutschen Union von den Vorbereitgn. d. Bundes bis zum Tode Kaiser Rudolfs II. 2 Bd. Schaffhausen: Baader.
 SCHWEGLER, A. Römische Geschichte. Fortgeführt v. O. Clason. 4 Bd. 1 Lfg. Berlin: Calvary.
 SIEBERT, W. Ueber das römische Exil. Berlin: Calvary.
 SPIEGEL, F. Eränische Alterthumskunde. Vol. II. Leipzig: Engelmann.
 THOMAS, E. Sassanian Coins. Trübner.
 ZELLER, J. Histoire de l'Allemagne. Fondation de l'empire germanique. Charlemagne. Otton le Grand. Les Ottonides. Paris: Didier.

Philology.

Original Sanskrit Texts on the Origin and History of the People of India, their Religion and Institutions. Collected, translated, and illustrated by J. Muir, D.C.L., LL.D., Ph.D. Vol. 4. Comparison of the Vedic with the later representations of the principal Indian Deities. Second Edition, revised. London: Trübner & Co. 1873.

A SUCCESSFUL elucidation of the history of the religious development of India would do more than anything else to advance our knowledge of the development of the religious impulse in mankind. On the one hand the Indian religion has roots reaching back to an extremely distant period; for, as is proved by the agreement of many essential elements of Vedic religion with corresponding ancient Greek, Italian, German, and Slavonic ones, the Vedas reflect, in the main, the religion of the Indo-Germanic race, as this had constituted itself before the separation of the different branches; that is to say, to a time long—at least some thousand years—prior to the beginning of our history. On the other hand, again, the Vedas form the groundwork of all the later religious formations of India, which, their variety notwithstanding, have all sprung from this original germ, and grown up independently without suffering any profound modification from foreign nations; so that in Indian religion we can trace the only really free development—nearly undisturbed for well nigh six thousand years—of the religious impulse amongst the Indo-Germans.

Besides this, in Indian literature an abundance of auxiliary facts have been preserved, which, if they do not suffice to explain the development exhaustively in all its aspects, at least throw light upon many sides of it. The external side of Indian religion, the mode and the objects of worship, is already known for many periods, and for others appears discoverable. The speculative and philosophical development which unfolds itself in connection with the religion receives countless illustrations from Indian literature. Our sources of information are scantier respecting the ethical fabric to which this served as foundation; but here too it is possible to draw more conclusions than might be expected

at first. As to the point of most importance for the right judging of a religion, that singular copy or off-print of the human mind, in which the highest product of the native human striving after ideal completeness, is made serviceable to deep and urgent practical necessities,—the way in which it works and lives in a whole people, how it elevates or debases them, ennobles or degrades, gives strength or weakness, refines or deadens the feelings; the class of feelings which it calls chiefly into play, the degree of depth, and intimate self-devotion which it may succeed in inspiring, in what relation the action of the religious stands to the critical spirit and to what extent it controls the latter or is limited, guided, and controlled by it;—these and similar questions may be determined with tolerable certainty for many periods, especially those beginning approximately with the present era. The Mahābhārata, the Purāṇas, the glorifications of particular holy places therewith connected, the didactic literature, religious poems, mystical writings, those concerning superstition, and others of the like kind, allow us to see further into the religious life of the Indians than, perhaps, into that of any other people. What is seen there is certainly by no means always agreeable, but one also finds, between whiles, so much profound, intimate, and thoughtful tenderness that one is disposed to overlook many errors for the sake of the wonderfully deep and pure source whence they flowed at starting.

The work to which these remarks are devoted offers excellent assistance towards the attainment of exacter insight into a very essential part of this religion. It deals, indeed, only with a small number of Indian divinities; but those considered are such, especially Vishṇu and Śiva, as have long occupied the highest place in the Indian Olympus, and the manner in which they are discussed by the author is exactly calculated to furnish a secure foundation for the history of their development from the time of the Vedas to that of the Purāṇas.

The work is a second edition, enlarged in various ways; the first was gratefully utilized by all who were interested in India and the religious life of humanity, and all the praises accorded to it, in public and in private, are equally well deserved—in some cases even better deserved—by the present edition.

The work consists substantially of a collection of passages from Indian, especially from Vedic, writings which contribute to a knowledge of the nature and the historical development of the divinities therein treated. They are printed in the original, accompanied by a careful and excellent translation, in the preparation of which no valuable aids have been neglected. To these are subjoined explanatory considerations, which must always be read with great interest; even though it may be foreseen that additional materials and a more searching examination of those already known will cause them to undergo considerable modification.

THEODOR BENFEY.

Hartel's Homeric Studies. [*Homeric Studies: Beiträge zur homerischen Prosodie und Metrik.* Von Wilhelm Hartel.] Berlin. 1873.

THIS work is an example on a limited scale of the remarkable impulse which the modern Science of Language has given to Greek, and especially to Homeric studies. The notion which lies at the root of that science, of a gradual and perfectly continuous process of change going on in every language and forming its history, is eminently applicable to Greek, because there is no language of whose history we possess so complete a series of records. In Homer we have a specimen of Greek which takes us back a considerable way towards the period at which it parted from the cognate languages. Homer accordingly is the field on which the older Philology receives the greatest amount of help from the

modern "Science of Language." And this help extends to every part of Homeric criticism—the "higher" as well as the "lower." On the one hand the comparison of Sanscrit and other Indo-Germanic languages serves to explain and defend many grammatical and metrical peculiarities, and on the other hand it throws light on the relations of the Epic dialect as a whole, and therefore on all the questions of time and place which make up the Homeric controversy.

The present work (an octavo of 126 pages) deals with the irregular lengthening of short final syllables in the Homeric poems. It first appeared in the Transactions of the Vienna Academy, and was reviewed in an admirable paper by Dr. Georg Curtius, in the fourth volume of his *Studien zur Griechischen und Lateinischen Grammatik*. The present edition contains some fuller discussion of points on which Curtius had expressed his dissent.

The discovery of the Digamma, as Dr. Hartel points out, first gave scholars the hope of explaining the metrical difficulties of Homer, and thus of restoring an original smoothness to his text. Until then every irregularity was classed as a "poetical licence," due to the necessities or convenience of the versification. At first it was imagined that the Digamma would serve as a universal solvent; a "Digamma" was introduced wherever the metre called for the remedy. It was soon found however, with the advance of the Science of Language, that in a large number of cases the Digamma could not be introduced. Some scholars, in particular C. A. I. Hoffmann in the *Quæstiones Homericae*, and H. A. L. Ahrens, sought for other "lost consonants." Observing that short final vowels were often lengthened before liquids, they supposed the existence of combinations such as $\sigma\mu$, $\sigma\nu$, $\sigma\tau$, $\sigma\rho$, $\sigma\lambda$, of which the first consonant was afterwards lost. These double consonants, they thought, either were pronounced in the age of Homer, or had left as a trace of their former presence the tendency to double the initial liquid after a vowel. The success of this mode of explanation was considerable, but still only partial. In the case of the ρ the number of roots which can be shown to have originally begun with $F\rho$ or $\sigma\rho$ is so large that nearly every instance of a short vowel lengthened before initial ρ may be explained by position: and it may further be held that the instances of lengthening have been so numerous as to create a new general rule. In other words, $\acute{\iota}\rho\acute{o}\varsigma$ was at first $\sigma\rho\acute{o}\varsigma$, and therefore $\kappa\alpha\tau\grave{\alpha} \acute{\iota}\rho\acute{o}\nu$ was pronounced $\kappa\alpha\tau\grave{\alpha} \sigma\rho\acute{o}\nu$. When the σ was lost this might become $\kappa\alpha\tau\grave{\alpha} \acute{\rho}\rho\acute{o}\nu$, just as in French we have *il parle*, but *parlet-il*. Finally, the number of instances like $\kappa\alpha\tau\grave{\alpha} \acute{\iota}\rho\acute{o}\nu$ might create a habit of lengthening any vowel before initial ρ , as we find done in Attic. So far everything seems plain: but when Hoffmann and Ahrens proceeded to apply this method to the cases of short vowels lengthened before other liquids, especially μ and λ , they were led to propose a number of untenable etymologies. The difference between ρ and μ appears very strongly when the statistics are drawn out for each. Out of 126 lengthenings before ρ there are 85 which can be etymologically explained: out of 321 lengthenings before μ there are only 11. It may be suggested that the loss of σ before μ occurred earlier and left fewer traces than the loss of F and σ before ρ : but, on the contrary, the combination $\sigma\mu$ is not very rare in later Greek, whereas $F\rho$ and $\sigma\rho$ became extinct.

Dr. Hartel, following Hoffmann, has drawn a careful distinction between the cases in which the cause of lengthening can be traced in the history of the final (short) syllable and those in which it seems to reside in the initial consonant following—between cases (to use the convenient German words) of old "Auslaut" and old "Anlaut." The most valuable part of his conclusions, according to Dr. Curtius, is that which relates to "Auslaut." The original length of the

of the Dat. Sing., of the *a* of the Neut. Plur., and of many stems in *i* and *υ* (βλοσυρώπις, βρωτός, &c.) seems made out. That the *av* and *ov* of the 3 Plur. were pronounced *avv*, *ovv* (original *avt*, *ovt*) seems very possible, but the instances are not numerous. On the influence of initial consonants on a preceding vowel there is less agreement. Dr. Hartel shows very happily that the lengthening cannot take place if there is any pause in the sense between the two words: in short that it depends on the words being run together in pronunciation. So far however Dr. Curtius is at one with him. The point at issue (if we have rightly understood the controversy) is this: Dr. Hartel regards the tendency to "doubling" as inherent in the nature of the liquids. It is not strictly a doubling, but a thickening or lengthening of the consonantal sound. This thickening he conceives is liable to be produced by the arsis or metrical stress, much as the doubling of consonants in Italian has been produced (*parlerotti* for *parlerò-ti*, &c.). Dr. Curtius clings to the etymological explanation, but he supplements it by other considerations deserving of the greatest attention. The influence of false analogy—custom which once was rational creating custom which is irrational—is always potent in the development of language. But the Homeric language, he shows, must be treated as a whole, and with regard to its peculiar character and history. It is impossible to believe that the dialect, as we find it in the poems, was spoken by a single people at any one time. It has all the characteristics of a poetical and conventional dialect, formed by the singers of many generations, in which new and old were blended in successive layers and in ever varying proportions. A large proportion of the poems is made up of traditional formulae which the author or authors (for in this point of view the question of authorship makes no difference) found ready made, and employed as the established materials of the art. But since the language was constantly changing, these formulae must have presented much that was obsolete, both in grammar and metre, when the poems were composed. These obsolete features then must have been felt partly as archaisms, partly as irregularities. In both characters they were likely to be imitated: for Greek literature in all periods shows the tendency to choose or form a style, a conventional artistic dialect suitable to each form of art. Thus in Dr. Curtius' words, "much seemed to be *licence* which in reality was *archaism*:" and the effect was not only that real archaisms gave birth to imitative pseudo-archaisms, but also that the original strict rules of the metre were materially loosened. This was especially the case from the loss of the Digamma. Originally, in all probability, the rules regarding Hiatus were strictly observed. Then came the loss of the Digamma, and not only created a number of cases of Hiatus, but created the impression that irregular Hiatus might be occasionally tolerated.

It would be impossible in a short space to do justice to the arguments of each side of this interesting controversy. One consideration on which Dr. Hartel lays considerable stress, may be noticed. He finds that in Hesiod and the Homeric Hymns the number of metrical irregularities of the kind in question is much smaller, and chiefly found in direct imitations or reminiscences of Homer. But, he argues, if there had been a tendency to create such irregularities by false analogy, we should have found them increase instead of diminishing as time went on. Dr. Curtius replies, and apparently with reason, that the period of Hesiod and the Hymns (700-500 B.C.) was one in which the original creative impulse of Epic poetry had virtually died out. Hence the metrical feeling was that of a later time, modified only where the older standards exercised a direct influence. Thus the exceptions were really of the same kind as those which were

occasionally introduced in imitation of the supposed "licence" of Homer by Apollonius Rhodius, or Virgil.

Dr. Hartel's book contains much that is suggestive on wider questions of metre and rhythm. His analysis of the rhythmical value of the punctuation, and his observations on the different force of the arsis in different parts of the verse, are especially valuable. Every scholar must join in the hope expressed by Dr. Curtius that the present book will be followed by at least one other discussing the Hiatus and the Digamma.

D. B. MONRO.

Knös on the Digamma in Homer. [*De Digammo Homericæ Quaestiones*. I. *Scriptis* Olaus Vilelmus Knös.] Upsala: Universitets Arsskrift. 1872.

THIS work (which reached us after the preceding article was written) does not offer so much novelty as that of Dr. Hartel, but possesses in a high degree the merits of care, judgment, and exhaustiveness. It consists of two parts. In the first (which is much the shorter) Dr. Knös examines the metre of Homer with the view of ascertaining the conditions under which the loss of a consonant may properly be inferred. A highly interesting parallel to the way in which such a consonant may be restored from metre alone is given by him from the old Scandinavian alliterative poetry. The manuscripts in many cases, it appears, give words beginning with *r* where the alliteration requires *v*, the reason being that when the poems were composed the same words began with the combination *vr*. A more complete analogy to the Homeric facts could hardly be imagined. In the second part Dr. Knös examines all the words in which a lost Digamma has ever been traced, and devotes separate chapters to the Palatal Spirant and to the combination *σf*. As instances of judicious treatment of uncertain or contested matter the reader may look at his account of *ἔπος*, p. 86-88; of *ἴφι*, p. 127, where he rightly follows Bekker in making it a neut. adj., not an instrumental case; or of the distinct verbs *ἐρύω* *I draw* and *ἐρύομαι* *I shelter*. On the general question of the restoration of the Digamma to the text, and the impossibility of carrying out uniformity, he says simply and conclusively that if we must admit such doublets as *ὦς* and *ὄς*, *πόλις* and *πτόλις*, *κίδναμαι* and *σίδναμαι*, *Ἀχιλλεύς* and *Ἀχιλεὺς*, with many more of the same kind, there can be no fatal objection to recognising such doublets as *ἄναξ* and *ἑάναξ*, *οἶνος* and *φοῖνος*. The addition of an index and table of contents would have been useful.

Intelligence.

We are most glad to learn on the best authority that Dr. Strack, who is now at St. Petersburg, has obtained the consent of the Imperial Government to the photo-lithographic reproduction of a Hebrew MS. of the "later prophets," important not only from its antiquity (date A.D. 916), but from its being provided with the Assyrian-Babylonian accents and vowels. A description of the MS. will be found in Dr. Pinner's *Prospectus der der Odessæer Gesellschaft gehörenden Manuscripte* u. s. w., pp. 18-28, and in Dr. Strack's excellent little work, which we once again earnestly recommend to the student, *Prolegomena critica in vetus Testamentum Hebraicum*, p. 52. The number of copies will be limited to 250.

New Publications.

- BLOCHMANN, H. The Prosody of the Persians, according to Saifi, Jami, and other writers. Trübner.
BOMBAY SANSKRIT TEXTS. No. IX. Nāgajñbhata's Paribhāshendusekhara. Ed. Dr. F. Kielhorn. Part II. Translation and Notes. Trübner.
BÜTTNER, E. Ueber das Verhältniss v. Vergils Eklogen zu Theokrits Idyllen. Berlin: Calvary.
BUXTORFIUS, J. Lexicon chaldaicum, talmudicum et rabbinicum. Denuo editit et annotatis auxit B. Fischer. 29 Fasc. Leipzig: Schäfer.
DOOLITTLE, J. Vocabulary and Handbook of the Chinese language. Romanized in the Mandarin Dialect. Vol. II. Parts II., III. Trübner.
FÉLIX, P. Las Fados en Cévenos; poème languedocien. Alais: imp. Bruguierolle.

- GUNDERT, Dr. H. A Malayalam and English Dictionary. Trübner.
 HITZIG, H. Beiträge zur Texteskritik d. Pausanias. Heidelberg : Groos.
 JOUANCOUX, J. B. Essai sur l'origine et la formation du patois picard, avec l'indication sommaire des lois de la transformation des mots et leur application à la recherche de quelques étymologies picardes. Amiens : Imp. Caron fils.
 KERN, Dr. H. The Brhat-Sanhitā, or Complete System of Natural Astrology of Varāha-Mihira. Translated from Sanskrit into English. Part V. Trübner.
 LEITNER, Dr. G. W. Results of a Tour in Dardistan, Kashmir, &c. Vol. I. The Languages and Races of Dardistan. Part III. Trübner.
 LEO, F. Quaestiones Aristophaneae. Bonn : Cohen und Sohn.
 NOTICES of Sanskrit MSS. By Rajendralala Mitra. No. VI. (Vol. II. Part III.) Trübner.
 REINHARDT, C. De Isocratis aemulis. Bonn : Cohen und Sohn.
 SAUPPE, H. Symbolae ad emendandos oratores atticos. Göttingen : Dieterich.
 SUSEMIHL, F. De Politicis Aristoteleis quaestionum criticarum particula VI. Berlin : Calvary.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 79.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Monday, September 15, and Advertisements should be sent in by September 12.

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British Association for the Advancement of SCIENCE,

22, Albemarle-street, London, W.

The NEXT ANNUAL GENERAL MEETING will be held at BRADFORD, commencing on WEDNESDAY, September 17.

President Designate—Professor A. W. WILLIAMSON, Ph.D., F.R.S., F.C.S., in the place of J. P. JOULE, D.C.L., LL.D., F.R.S., who has resigned the Presidency in consequence of ill-health.

NOTICE to CONTRIBUTORS of MEMOIRS.—Authors are reminded that, under an arrangement dating from 1871, the acceptance of Memoirs, and the days on which they are to be read, are now, as far as possible, determined by Organizing Committees for the several Sections before the beginning of the Meeting. It has therefore become necessary, in order to give an opportunity to the Committees of doing justice to the several communications, that each Author should prepare an Abstract of his Memoir, of a length suitable for insertion in the published Transactions of the Association, and that he should send it, together with the Original Memoir, by book-post, on or before September 1, addressed thus—"General Secretaries, British Association, 22, Albemarle-street, London, W. For Section....." If it should be inconvenient to the Author that his Paper should be read on any particular day, he is requested to send information thereof to the Secretaries in a separate note.

G. GRIFFITH, M.A., Assistant General Secretary, Harrow.

Royal School of Mines.—Department of Science and Art.

During the Twenty-third Session, 1873-74, which will commence on the 1st of October, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given :—

1. Chemistry. By E. Frankland, Ph.D., F.R.S.
2. Metallurgy. By John Percy, M.D., F.R.S.
3. Natural History. By T. H. Huxley, LL.D., F.R.S.
4. Mineralogy. By Warington W. Smyth, M.A., F.R.S.,
5. Mining. } *Chairman.*
6. Geology. By A. C. Ramsay, LL.D., F.R.S.
7. Applied Mechanics. By T. M. Goodeve, M.A.
8. Physics. By Frederick Guthrie, Ph.D., F.R.S.
9. Mechanical Drawing. By Rev. J. H. Edgar, M.A.

The Fee for Students desirous of becoming Associates is £30 in one sum, on entrance, or two annual payments of £20, exclusive of the Laboratories.

Pupils are received in the Chemical Laboratory, under the direction of Dr. Frankland, and in the Metallurgical Laboratory, under the direction of Dr. Percy. These Laboratories will be re-opened on October 1st.

Tickets to separate Courses of Lectures are issued at £3 and £4 each.

Officers in the Queen's Service, Her Majesty's Consuls, Acting Mining Agents and Managers may obtain tickets at reduced prices.

Science Teachers are also admitted to the Lectures at reduced fees.

His Royal Highness the Prince of Wales grants Two Scholarships, and several others have also been established by Government.

For a Prospectus and information apply to the Registrar, Royal School of Mines, Jermyn-street, London, S.W.

TRENHAM REEKS, Registrar.

NOTE.—By order of the Lords of the Committee of Council on Education, the instruction in Chemistry, Physics, Applied Mechanics, and Natural History will be given in the New Buildings, in the Exhibition Road, South Kensington.

University College, London. Session, 1873-74.

The SESSION of the FACULTY of MEDICINE will commence on Wednesday, October 1. INTRODUCTORY LECTURE at 3 P.M. by Dr. F. T. ROBERTS, B.Sc.

The SESSION of the FACULTY of ARTS and LAWS (including the Department of the Fine Arts) will begin on Thursday, October 2. INTRODUCTORY LECTURE at 3 P.M., by Professor O. HENRICI, Ph.D. INTRODUCTORY LECTURE for the DEPARTMENT of FINE ARTS, on Thursday, October 2, at 4.30 P.M., by Professor E. J. POYNTER, A.R.A.

The SESSION of the FACULTY of SCIENCE (including the Department of the Applied Sciences) will begin on Thursday, October 2.

The EVENING CLASSES for Classics, Modern Languages, Mathematics, and the Natural Sciences, will commence on Monday, October 6.

The SCHOOL for BOYS between the ages of Seven and Sixteen will RE-OPEN on Tuesday, September 23.

Prospectuses of the various Departments of the College, containing full information respecting Classes, Fees, Days and Hours of attendance, &c., and Copies of the Regulations relating to the Entrance and other Exhibitions, Scholarships, and Prizes open to Competition by Students of the several Faculties, may be obtained at the Office of the College.

The Examination for the Medical Entrance Exhibitions, and also that for the Andrews Entrance Prizes (Faculties of Arts and Laws, and of Science), will be held at the College on the 25th and 26th of September.

The College is close to the Gower-street Station of the Metropolitan Railway, and only a few minutes' walk from the Termini of the North-Western, Midland, and Great Northern Railways.

JOHN ROBSON, B.A.,

August, 1873.

Secretary to the Council.

Junior Assistant for Photographic and Spectroscopic Observations in the Royal Observatory, Greenwich.

An open competition for one situation will be held in London, on Tuesday, September 30th, and following days.

A preliminary examination will be held in London, Edinburgh, and Dublin, on Tuesday, September 16th.

Limits of age, 18 and 25. Application for the regulations and the necessary form should be made at once to the Secretary, Civil Service Commission, Cannon Row, London, S.W.

THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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No. 80.] REGISTERED FOR MONDAY, SEPTEMBER 15, 1873. TRANSMISSION ABROAD. [Price 6d.

General Literature.

The Songs of the Russian People, as illustrative of Slavonic Mythology and Russian Social Life. By W. R. S. Ralston, M.A., of the British Museum, author of "Krilof and his Fables." Second edition. London: Ellis & Green. 1872.

Russian Folk Tales. By W. R. S. Ralston, M.A., of the British Museum, Corresponding Member of the Imperial Geographical Society of Russia, &c. London: Smith, Elder & Co. 1873.

It may seem superfluous to speak now of a work which, like the first of those above named, appeared some time ago and has already reached a second edition, a fact which sufficiently proves it to have been favourably received by the public. Nevertheless I am tempted to take this occasion of recurring to it *à propos* of the author's second work, which is also a continuation of the first, as I wish to consider them both, not from the general point of view, but as bearing more particularly upon the history of culture in the narrower sense. The former aspect, no doubt, is in some ways the most attractive, for every reader must be interested to know the kind and manner after which the Russian people expresses its feelings and sentiments amid the various vicissitudes of life in songs and tales, and how these reflect its modes of life and thought; especially as Ralston has executed his work with great skilfulness, selecting the most important and most attractive elements out of the abundant material before him. Yet the other side, which I propose to consider in the following lines, is scarcely, if at all, inferior in interest, especially as illustrating the outward and the secret relationship of certain customs, usages, superstitions, and ideas of the Russians with those of other peoples, a relationship which often extends much further than is apparent at the first glance. Thus Ralston remarks at starting (p. 11) about certain songs which ought to be described rather amongst the games than amongst the poems: "Therefore we will not dwell upon them at present; but there are a few others in which historical allusions occur, and which therefore seem to deserve special attention. Such for instance are the 'Titmouse' and the 'Oak Bench.' The subject of the first is marriage. The Bullfinch, after many unsuccessful attempts, determines to get married, so his sister, the Titmouse, invites the birds to her dwelling, in order that he may choose a spouse. The person who represents the Bullfinch wanders

about inside the Khorovod (choral dance) seeking for his bride among its members, &c. . . . This song is said to have been written during the reign of Ivan the Terrible (A.D. 1533-1584), but to have been prohibited for a time, on account of its containing allusions to the life of a certain influential Boyar." Nothing of the kind, however, is the case, and the Russian *savants* who have attempted to discover historical allusions here are in error; for such songs about the wedding of birds and other animals are met with also amongst other nations, as, for instance, the marriage of the blackbird and the thrush (*Mittler Deutsche Volkslieder*, Frankft. am Main, 1865, No. 559, 561), of the chaffinch and the nightingale (No. 560), of the cock and the hen (No. 562), of the lark and the chaffinch (Puymaigre, *Chants populaires du pays messin*, Metz et Paris, 1865, pp. 309-12; also found in Cambrésis and in Provence), of the cockchafer and the fly (*Mittler*, No. 608-9), of the horse fly and the common fly (Nyerup, *Udvalg af Danske Viser*, Kjöbenh., 1821, ii. 104), of the grasshopper and the ant (*Widter, Lieder aus Venetien*, Wien, 1864, No. 102a; Ferraro, *Canti popol. monferrini*, Torino-Firenze, 1870, No. 97, 100), of mice and weasels (Passow, *Траговѣя Поваіка* Lips 1860, No. 623), &c., see also Uhland *Schriften* 3, 75 seqq. The fundamental idea of these songs probably dates from a time when the animal world was much nearer to mankind than now, and men transferred to it their own ideas and habits of life, though as they are nearly all of a humorous character, they must belong in their present form to a somewhat later period. Cf. Uhland l.c. 52-179. Like the above-named song, the *Posidyelki*, or social gatherings of the young country people during the long winter evenings, which begin with spinning and talk and end with songs and dances (p. 32), are not peculiar to Russia, but similar customs prevailed (and to a certain extent still prevail) in most other countries of Europe; in Germany such gatherings of the village youth on winter evenings are called *Spinnstube*, *Rockenstube*, *Kunkelstube*, *Lichtstube*, also *Spinnicht*, and *Kunkelheimgarten*; in Sicily in the neighbourhood about Noto they are called *sedia* or *sirennà*, and a pleasant description of them is given in the Venetian paper *La Scena*, 1872, No. 8; the writer of which, however, is far from imagining that he is at the same time describing a *Posidyelka*. As a matter of course, many of the Russian songs are devoted to the subject of love. "Here for instance," says Ralston (p. 48), "is the

outline of a romantic story. A brave youth leaves his native Ukraine and enters into the service of 'the King of Lithuania,' who shows him great favour. The king has a fair daughter whose heart is won by the young Cossack, a fact of which the father is made aware by the youth's own evil brothers," who repeat the idle boastings in which he had indulged when under the influence of strong drink. The king in his wrath orders his favourite to be taken out at once to the place of execution. His commands are obeyed, and the youth soon stands at the foot of the gallows. "While he ascended the ladder, and began to bid the princess farewell in a loud voice, she heard him afar off, hastened into her lofty chamber, and taking two steel daggers, pierced her white bosom. In the open field swings the brave youth,—on the daggers bends down the princess and dies." I do not think I am mistaken in seeing something more than an accidental resemblance between this song and the far-famed song of the Scandinavian North, *Hagbard and Signe*; see Svend Grundtvig, *Danmarks Gamle Folkeviser* No. 20.

There is a noteworthy custom prevailing amongst the Ruthenians when a dying man's agony is greatly prolonged, to pass a black dog through a hole made in the roof over his head, in the hope of thereby expediting the liberation of the soul from the body (p. 108). This is obviously a symbolical act meant to show the soul of the dying man the way out of its tenement; for the dog is often used to represent the soul, as I have shown in Pfeiffer's *Germania* xi. 170; it may be remembered too that in the place of Hecuba and the beggar who was stoned, a dog was, in each case, found underneath when the stones were cleared away (see concerning the beggar *Philostr. Vita Apoll.* iv. 10). But that the soul escapes through an opening in the roof is the belief also of the Chinese and North American Indians (Tylor, *Prim. Cult.* i. 477), and arose no doubt because the soul was supposed to leave the house by the same road as the living body entered it, which in early times was always the roof, as was quite lately the case amongst the Aleutians, Kamchadals and Mandans (see the Berlin *Zeitschrift für Ethnologie*, iii. 165); for which reason also in ancient Rome persons supposed to be dead were only allowed to return to their houses through the roof, as is still the custom in Persia (see my paper in the last-named journal, v. 101). If however the soul was conceived to leave the house through the window set open for the purpose as in Germany (Wuttke, *Volksabergl.* § 725), in Russia (Ralston, p. 314, "when all is over the window is immediately opened, and sometimes a cup of water is set on the sill for the use of the departing soul"), and elsewhere; it was usual to carry the corpse out the same way, as amongst the Russians (Ralston, p. 318, "The corpse was often carried out of the house through a window or through a hole made for the purpose, and the custom is still kept up in many parts;") and amongst the Greenlanders (Rink's Supplement, p. 97). In another place (p. 112) we read that *Rai* is the abode of the dead. "There, according to a tradition current amongst the Lithuanians, as well as among some of the Slavonic peoples, dwell the spirits which at some future time are to be sent to live upon earth in mortal bodies, and thither, when disembodied, will they return. No cold winds ever blow there, winter never enters those blissful realms, in which are preserved the seeds and types of all things that live upon the earth," &c. Further on (p. 374) it is related that far away amid the ocean waves, according to Slavonic tradition, lies the island called Buyán, one of the many forms of the *Rai* or Paradise. "There are to be found the Snake older than all snakes, and the prophetic Raven, elder brother of all ravens, and the Bird, the largest and oldest of all birds, with iron beak and copper claws, and the mother of Bees, eldest among bees." This idea that

in heaven there "are preserved the seeds and types of all things that live upon the earth" is likewise not peculiarly Russian; for on the one hand we are told that Yima, at the bidding of Ormuzd (*Vendidad* ii.), laid out a gigantic garden, and brought together in it the germs of all living creatures, cattle great and small, men, dogs, and the red shining fire, &c.; and on the other we meet with an exactly similar idea amongst the North American Indians and the ancient Peruvians (Tylor, *Prim. Cult.* ii. 221). Further on Ralston relates (p. 150), "When a water sprite's wife is about to bear a child, he assumes the appearance of an ordinary mortal, and fetches a midwife from some neighbouring village to attend her." This belief is very widely spread; it is found in various places in Germany (A. Kuhn, *Westphäl. Sagen*, i. 285-6), in Denmark and Sweden (Grimm's *Deutsche Mythol.*, p. 425), in Norway (Fay, *Norske Folke Sagn*, Christian. 1844, p. 32), in Ireland (*K. von K. Erin*, Stuttg., 1847, iii. 243-250), and in Hebrew works (Tendlau, *Das Buch der Sagen und Legenden jüdischer Vorzeit*, 3rd ed., Frankfurt am Main, 1873, p. 122). In speaking of the water spirit (Vodyany), Ralston notices (p. 152) the superstition of the Bohemian fishers who are afraid of assisting a drowning man, thinking the Vodyany will be offended and will drive away the fish from their nets. This idea is familiar to every one from Sir Walter Scott's *Pirate*, and Tylor (*Prim. Cult.* i. 98) remarks on the subject: "Were this inhuman thought noticed in this one district (Zetland) alone, it might be fancied to have had its rise in some local idea now no longer to be explained. But when mentions of similar superstitions are collected among the St. Kilda islanders and the boatmen of the Danube, among French and English sailors, and even out of Europe and among less civilized races, we cease to think of local fancies, but look for some widely accepted belief of the lower culture to account for such a state of things." It is told of the wood demon Lyeshy (p. 158) that if by any chance a passer-by strikes upon his recent trail, he becomes bewildered, and does not easily find his way again; his best plan is to take off his shoes, and reverse their linings, and it may be as well also to turn his shirt or pelisse inside out. There is a German superstition to the same effect, according to which people who lose their way in a wood must either change their shoes or turn their pockets out or fasten their aprons wrong side uppermost (Wuttke, § 630). In the government of Archangel a whirlwind is set down to the wild dancing of a Lyeshy with his bride (p. 160), and in another place (p. 382) we read: "The Russian peasant generally attributes whirlwinds to the wild dances in which the devil indulges when celebrating his marriage with a witch; but sometimes, he thinks, a wizard is being whirled about in the 'dust-spouts' which may be seen in summer in the open plains: and so, if a sharp knife be thrown with good aim at one of them, it will fall to the ground streaming with blood." The notion of certain spirits as dancing with their brides in the whirlwind must have been naturalized in Germany too; for so only can we explain the German name of *Windsbraut* applied to the whirlwind; comp. Grimm (*Mythol.*, p. 598), who observes (p. 599) "throwing the knife is known to German superstition everywhere."

A pleasing legend of the Lusatian Wends given by Ralston (p. 194) runs as follows: "The Virgin Mary and the infant Christ once passed by a field in which a peasant was sowing barley, and she said to him: 'God be with thee, good man! As soon as thou hast sown, take thy sickle and begin to reap.' In a little time came a crowd of Jews in pursuit of her, and asked the peasant if he had seen a mother and child go by. 'She passed not long ago,' he replied, 'just when I was sowing this barley.' 'Idiot! why that must be twelve weeks ago!' exclaimed the Jews, seeing

that the barley was now ripe, and the peasant was reaping it, and they turned back. The same story," Ralston continues, "is told in a Little-Russian *Kolyadka*, only the Virgin carries on her hand a hawk—one of the symbols of the Sun God—instead of leading the infant Christ." This legend is to be found too in Catalonia, in a form resembling the Lusatian one, and probably in many other countries, being doubtless derived from some version of the apocryphal gospel of the Infancy of Christ. According to the Catalonian version, the holy family, fleeing from the massacre of Bethlehem, came to a man sowing seed; the Virgin Mary bade him fetch his scythe to cut the crop, and he, full of faith, went to do so, and on his return found the crop ripe, so that the holy family could hide behind the first sheaf which he bound. When their pursuers questioned him, he replied that the fugitives had passed when he was sowing the field, at which they turned back disconcerted, and did not hear how a plant of mint and a "hunger bird" (jay, *gaitx*, *garulus glandarius*) called out, "Behind the sheaf!" So that God cursed them both, saying to the plant, "Mint thou art, and thou wilt mint lies; thou shalt bear flowers but no fruit" (*Tu ets menta y mentirás—Florirás y no granarás*). And to the bird he said: "Hungry thou art, and hungry thou shalt remain; however much thou eatest, thou shalt never be satisfied!" (*Gaitx ets y gaita serás—Per tant que menjis, no engreixarás*). And that is why the mint never bears grain, and why the jay when he pounces on a field of buckwheat and goes on eating without stopping, is still always hungry. (Maspons y Labrós, *Lo Rondallayre*, Segona Serie, Barcelona, 1872, p. 28: *La Menta y 'l Gaitx*.)

In several places (e.g. pp. 198, 307) Ralston observes that the Slavonic divine blacksmith became transformed in Christian times into the double saint Kuz'ma-Dem'yan (Cosmas and Damian). This transformation, like many others of the kind, is not a little enigmatical, for in all the legends of these saints, as narrated in the *Legenda Aurea* (cap. 143, ed. Grässe), there is nothing at all to remind us of the blacksmith's art, the profession of these two saints, who were martyred under Diocletian, being that of physicians. There is only one word in their legend which could have given occasion to their transformation into smiths. In the account of one of their miraculous cures it is said: "Quidam vir sanctis martiribus serviebat, cui cancer unum crus totum consumserat. Et ecce dormiente illo sancti Cosmas et Damianus devoto suo apparuerunt unguenta et ferramenta secum portantes," &c. It is not quite inconceivable that the word *ferramenta* (iron instruments) may have brought about the transformation of the surgeons into smiths. It would not be the only case of the kind.

Special virtue is ascribed to the dew that falls on certain nights. In White Russia, it is the custom on St. George's day to drive the cattle afield through the morning dew, and in Little Russia and Bulgaria the young people go out early and roll themselves in it. The habit of washing in dew on the morning of St. John's day is common to various Slavonic peoples (pp. 231, 241). The pagan Icelanders and Swedes were also in the habit of bathing in the dew on Midsummer night, "ut morbi corporis miraculose sanentur," as Finn Magnussen mentions, *Lexic. Mythol.*, p. 672. There is a French superstition, "se rouler sur de la rosée d'avoine le jour de S. Jean avant le soleil levé, pour guérir des fièvres." (Thiers, *Traité des Superstitions*, ii. ed., Paris, 1697, i. 301). "En Saintonge, les amoureux vont se rouler nus dans la rosée, pour être aimés de qui ils aiment. Cela s'appelle *prendre l'aiguail de mai*" (Bugeaud, *Chants et Chansons populaires des Provinces de l'Ouest*, Niort, 1866, i. 281). In the neighbourhood of Como there is a saying, "S. John's dew heals every ill" (*La rosada de San Giovanni—La guariss*

tucc i malann. Bolza, *Canzoni popolari comasche*, Vienna, 1867, p. 648.) And Thomas Moore in a note on *Lalla Rookh* observes: "The Nucta, or Miraculous Drop, falls in Egypt precisely on St. John's day, and is supposed to have the effect of stopping the plague." Gervasius of Tilbury mentions as an English custom of his own time (beginning of the twelfth century) "Plurimos quoque vidimus potentes, qui sancto die Pentecostes cibum non sumerent, donec rorem de caelo hausissent vel super se descendisse sensissent (see my ed. of the *Otia Imperialia*, Hannov., 1856, p. 2 and note pp. 54-7). Special healing power was attributed to the *Pfingstborn* (Whitsuntide-well) near the town of Steinau in the province of Hanau; people gathered the May-dew on the adjacent meadow, drank it, and washed themselves with it (Lynker, *Hessische Sagen*, No. 329). One sees that Maytime was held sacred in the earliest times, as it still continues to be honoured with various festal celebrations; and this too holds good of Russia. "On Thursday before Trinity Day or Whit Sunday (the Semik holiday) the Russian villagers and the common people in the towns go out into the woods, sing songs, weave garlands, and cut down a young birch tree, which they dress up in woman's clothes, or adorn with many coloured shreds and ribbons. After that comes a feast, at the end of which they take the dressed-up birch tree, carry it home to their village with joyful dance and song, and set it up in one of the houses, where it remains as an honoured guest till Whit Sunday. On the two intervening days they pay visits to the house where their 'guest' is, but on the third day, Whit Sunday, they take her to a stream, and fling her into its waters, throwing their Semik garlands after her. . . . In these instances the Semik birch tree, the 'bush,' the 'poplar,' and the Whitsuntide puppet are all representations of some Deity of the Spring, whom the people worshipped in olden days and whose memory still survives" (p. 234-5). Comp. Grimm, *Mythol.*, 738. Similar customs prevail in Sweden, as appears from a tale of Mrs. Carlén's (Paul Värning), where a popular fête in a village in Småland is spoken of: "A tall maypole was erected on that day (the festival of S. John), as every year, on a broad open space, gaily decked in long garments of birch boughs. The arms, wound round with garlands, bent in dignified semicircles to the slender waist, while the so-called neck shone with tinsel and great pearl necklaces made of strings of blown eggs: a huge crown adorned the head and completed the costume." In antiquity too we find deities, especially feminine ones, occasionally represented by decorated trees. "In Proserpine sacris celsa arbor in effigiem virginis formamque componitur, et cum intra civitatem fuerit illata, quadraginta noctibus plangitur, quadagesima vero nocte comburitur" (Firm. Mat. de err. prof. rel., 27). Proserpine is of course in all ways nearly related to the goddesses of spring. The following passage (Ralston, p. 238) is still *apropos* of the Whitsuntide festivities: "On the banks of the river Metch, near Tula, there stands a circle of stones. These, according to popular belief, were once girls who formed a Khorovod on this spot, and who danced on Whit Sunday in so furious a manner that they were all thundersmitten into stone." Similar legends to this are found in England (Max Müller's *Chips*, iii. 284-5); Stonehenge itself being called *chora gigantum* by Geoffrey of Monmouth (cf. Gervas. of Tilbury, ed. Liebrecht, p. 81). Tall upright stones, the more when arranged in a circle, may easily be taken, especially by the lively imagination of the people, for groups of transformed dancers, and we meet accordingly with tales of the kind in very many places, where they are mostly applied to Sabbath-breakers. See Grässe, *Der Tannhäuser und der ewige Jude*, Dresden, 1861, p. 121; Pauli, *Schimpf und Ernst*, No. 388,

with Oesterley's note (Bibliothek des literar. Vereins in Stuttgart No. 88); W. Menzel, *Die Vorchristliche Unsterblichkeitslehre*, Leipzig, 1870, i. 144. A kindred legend in Normandy is quoted by Edéstand du Ménil, *Etudes sur quelques points d'archéologie*, Paris et Leipzig, 1862, p. 472. That there were other ways in which, according to popular belief, the accursed dancers were punished, and that this whole series of Christian legends, mostly of mediæval origin, point to an ancient heathen Phallus worship, has been shown in the *Revue Celtique*, Paris, 1870, vol. i., p. 140., No. 6, by the present writer.

On p. 255 Ralston speaks of a very singular ceremony performed (on the first of September) by the girls in many parts of Russia; they make small coffins of turnips and other vegetables, enclose flies and other insects in them, and then bury them with a great show of mourning; and he observes: "It has been already mentioned that the soul was often represented by the heathen Slavonians as a fly, gnat, or other insect." It would seem therefore that we have to do, in the Russian custom, with a symbolical funeral ceremony held for all the corpses which have been left unburied in the course of the year. Something of the same sort occurs in the Samoan Archipelago, where it is believed that the unburied dead wander about in the air bemoaning themselves, and punish their surviving relatives for their neglect, for which reason the latter sit down, spread out a cloth, and calling upon the gods, wait to see whether any kind of animal crawls upon the cloth. If there comes an ant, or a locust, or anything of that kind, it is the soul of the "young man," and is interred with all due ceremony in place of the missing corpse, but if no animal comes, the spirit is supposed to be angry with the persons seated (Turner, *Nineteen Years in Polynesia*, Lond., 1861, p. 233). The following ceremony observed on wedding days in Russia is also very remarkable (p. 280): "On the top of the steps leading into the house of the bridegroom, his father and mother meet the young couple, and bless them with bread and salt, while some of the relatives pour over them barley and down and give them fresh milk to drink." This sprinkling with corn was at one time an English custom, as appears from Polydore Virgil (*De Inv. Rer.* i. 4): "Spicea corona sponsa redimita caput, praesertim ruri, ducitur, vel manu gerit ipsam coronam: seu dum ingreditur domum, boni ominis causa, super ejus caput jacitur triticum, quasi inde consecutura sit foecunditatem." The like custom prevailed in the Jura, Béarn, Lorraine, Sardinia, Spain, heathen Prussia, India, and amongst the Jews (Edéstand du Ménil, *Etudes sur quelques points*, &c., pp. 4, 55); and again in Tibet: "Le repas fini, les membres des deux familles prennent la fiancée par les bras pour la mener à pied à la maison du futur, ou, si c'est loin, ils la conduisent à cheval. On jette des grains de froment ou d'orge grise sur la fiancée," &c. *Nouv. Journ. Asiat.* iv. 252. Why barley in particular should be used in this ceremony is explained by Edéstand du Ménil, l. c. p. 4, Bachofen, *Mutterrecht*, Stuttgart, 1861, p. 421, Gubernatis, *Zoological Mythology*, Lond., 1872, i. 47, and others. In one of the Russian marriage songs mention is made of a golden horned stag—one of the forms, perhaps, of the solar deity—who promises to be present at a marriage, and to light up the whole courtyard with his antlers (p. 307). Ralston's conjecture on this point is correct, for the sun-stag is frequently spoken of in northern mythology (see Simrock's *Deutsche Mythologie*, 3rd ed., pp. 275, 321). Amongst the Red-Skins the image of a stag was sacred to the sun (J. G. Müller, *Geschichte der Amerik. Urreligionen*, Basel, 1855, p. 70), and amongst Arabian poets the sun is described as a gazelle (F. G. Bergmann, *Les Chants de Sol. Sôlarliodh*, Strasb. et Paris, 1858, p. 110).

Speaking of wizards and witches, Ralston mentions that sometimes, instead of sending evil spirits to torment a man internally, a witch is supposed to change him by night into a horse and ride him over hill and dale until he is all but dead with fatigue (p. 393). This belief may be met with also in England, Denmark, and Iceland (Henderson, *Notes on the Folk-Lore of the Northern Counties of England*, Lond., 1866, pp. 154-8); in Germany and Flanders (J. W. Wolf, *Deutsche Sagen*, Leipzig, 1845, No. 141. *Niederländ. Sagen*, Leipzig, 1843, No. 389); Tyrol (Schneller, *Mährchen und Sagen aus Wälschtirol*, Innsbruck, 1867, p. 22, No. 3), and in Catalonia (Maspons y Labrós, *Rondallayre*, Barcelona, 1871, No. 23, "La bruixa del ferret"). According to another Russian superstition, there are heart-devouring witches, who trouble the peasant's repose (p. 413). This idea also is widely spread, and Ralston refers in this context to Grimm (*D. M.*, 1035), who traces it amongst the ancient Romans, the Germans, and Serbs. It is to be found too in the East, for Pietro della Valle (*Voyages*, &c., Rouen, 1745, vi. 164) writes from the Persian harbour Cambrù: "Une vieille arabe, nommée Meluk, fut mise en prison, accusée comme sorcière d'avoir ensorcelé, ou, comme ils ont accoutumé de parler, d'avoir mangé le cœur d'un jeune homme." And Ibn Batut relates of the Moslem inhabitants of the town Barwen in India: "There are some amongst them who know how to look at a man on such wise, that he immediately falls down dead under their gaze. The common people say that when any one has been in this way killed by a look, if the body is opened, no heart is to be found, so that they say: 'He has eaten his heart.' But this is most commonly done by women; such a woman is called *Kastar*. When I was a judge in Delhi, a woman was brought to me by a great crowd of persons calling out, 'She is a *Kastar*, she has eaten the heart of a young man, and he is dead.' They had brought the young man with them; then I commanded them to go at once with her to the Sultan's vizier," &c. (Kosegarten's *Notes on Nechshebi's Touti Nameh*, Stuttgart, 1822, pp. 263-4).

From the above examples sufficiently appears the scientific importance of Ralston's work, which fully attains the purpose expressed on the title page, and illustrates both Slavonic mythology and Russian social life in the most attractive and instructive manner.

We come now to the *Folk Tales*, and are glad to find that the task which Ralston has here proposed to himself is accomplished in a not less satisfactory manner. In this selection also he has, of course, made use of the most important collections, and has proceeded with so much taste and judgment that his work takes an honourable place amongst those of its class. As he observes in the Preface: "My chief aim has been to familiarize English readers with the Russian folk-tale; the historical and mythological problems involved in it can be discussed at a later period," it would be out of place to dwell minutely on the latter subjects, and we will only express a hope that in his future investigation of them he will proceed with the calmness and deliberation which has become peculiarly necessary of late, and will not indulge in quite as bold flights of fancy as other students in the same field. But on this point we need not be uneasy, for he has very wisely remarked, at the end of the *Songs*: "Great caution is requisite on the part of every one who undertakes to evolve a mythological system from a mass of popular traditions. In no case is such care more urgently demanded than in that of a student who has to deal with materials of so mixed a nature and of so doubtful an extraction as are the songs and stories of the Russian people,"—or indeed of every people. I will not therefore attempt to forestall the results of Ralston's inquiries into these problems, and will only, as before, call attention to a few points showing

the relationship between the ideas of the Russian people and those of other nations.

In the tale on p. 15 a grandmother says to her granddaughter who is threatened by a fiend: "O dear me, my poor unhappy child! Go quickly to the priest, and ask him this favour—that if you die, your body shall not be taken out of the house through the doorway, but that the ground shall be dug away from under the threshold, and that you shall be dragged out through an opening." What seems here to be an exceptional way of conveying a corpse out of the house was originally the common mode of proceeding amongst various nations, in order to prevent the dead man or his spirit from returning, when this was dreaded, and as it was supposed that the return would take place by the same route as the exit, a way was chosen that could be closed up again. Thus the Tuski take away their dead through a hole in the back part of the hut, and then close up the hole with the greatest care (Dale, *Alaska and its Resources*, p. 378, sqq.); the Hottentots removed their dead from the hut by an opening broken out on purpose to prevent them from finding the way back; the Siamese, with the same intention, break an opening through the house wall to carry the coffin through, and then hurry it at full speed round the house; see Tylor, *Prim. Cult.* ii. 23, who mentions also other cases among various nations of taking out the dead by a gap made on purpose. He adds, "Their motive is not clear:" but it becomes so from what is said above. See also Grimm *Rechtsalt.* pp. 726-8, No. 12. The touching tale of the dead mother who returns from the grave to suckle her child (pp. 19, 20) is repeated in the legends and songs of many lands. The distinguished Danish scholar Svend Grundtvig indeed, in his classical work *Danmarks Gamle Folkeviser*, iii. 868, declares this trait, which appears in a popular Danish song, to be spurious and inconsistent with popular belief, and even improbable and in bad taste; but it recurs too often for this to be tenable, not merely in many German fairy tales and legends (which Grundtvig quotes), but in a Walloon song (*Les Enfants de la Mort*; see Count Puymaigre's "Notes sur quelques Chansons populaires" in the *Revue de l'Est*, Metz, 1868, Extrait pp. 25-8), in one of Provence (*Les Orphelins*; Damase Arbaud, *Chants pop. de la Provence*, i. 73), in Northern Italy (*La povera Lena*; Ferraro, *Canti pop. Monferrini*, No. 32), and lastly in a modern Greek tale (Hahn, No. 83, *Die Elfen als Hausfrau*). In a story of which Ralston (p. 38) says that "it illustrates a custom in which the Russians differ from some other peoples," it is said of a certain shrew "she had not even been wrapped in swaddling clothes when a baby, nor swung in a *liulka*. Thereupon her husband determined to remedy the shortcomings of her early education, and whenever she showed herself capricious or took to squalling, he immediately had her swaddled and placed in a *liulka* and began swinging her to and fro. By the end of a half year she became "quite silky—all her caprices had been swung out of her." Here we are reminded of the old French pleasantry, which Bouchet (*Sérees*, p. 87) records of a man who had a bad wife, and every time she scolded, had her put in a cradle and rocked till she was still, "ce qui finit par la rendre fort douce."

The account of the price demanded for a cat (Whittington's cat, which however comes originally from further East than Russia) is very remarkable; the master of the animal says (p. 45): "I'll make the beastie stand on his legs while I hold him up by his fore-legs, and you shall pile gold pieces around him so as just to hide him—I shall be content with that." This is a very ancient mode of reckoning or measuring, especially for money fines; it appears in Snorri's *Edda* (Skalda 39), and was also customary in Germany,

England, and amongst the Arabs, as Grimm sets forth at length, *Rechtsalt.* p. 668 sqq., from whence I take the following old Welsh law: "Si quis felem horrei custodem vel occiderit vel furto abstulerit, felis summa cauda suspendatur, capite aream mundam et planam attingente, et in eam grana tritici offundantur, usque dum summitas caudae tritico cooperiatur." Wotton, *Leges Walliae*, iii. 5, who observes that, according to later ordinances in England, any one who killed a swan was obliged to hold it up by the bill and cover it with corn. To Grimm's references may be added the following old Spanish penalty for cat-stealing: "Quicumque gatum furatus fuerit, et dominus gati eum invenerit cum latrone, secundum forum dominus gati debet habere funem unius palmi, que collo gati ligata ab una parte, ab alia ligetur in quodam ligno acuto, quod debet figi ibi ubi ligatus fuerit in aliqua planicie, que LX. pedes contineat circumquaque: et latro debet cooperire milio gatum sic ligatum." (Ferd. Wolf, *Ein Beitrag zur Rechtssymbolik aus Spanischen Quellen*. Reports of the Vienna Acad., li. 109); and a passage from the well-known mediæval poem *Waltharius* (Grimm and Schmeller, p. 16, v. 403-7) "Dixerat 'o si quis mihi Waltharium fugientem—Afferat evinctum, ceu nequam forte liciscam!—Hunc ego mox auro vestirem saepe recocto—Et tellure quidem stantem hinc inde onerarem—Atque viam penitus clausissem vivo talentis.'" Akin to the passage from *Fredegar* (Grimm 672): "ut veniret legatarius Francorum sedens super equum, contum erectum tenens in manum ante aulam palatii Alarici et tam diu Alaricus et Gotthi super eum solidos jactarent, quousque legatum et equum et cacumen contum solidis cooperirent," is another from Meibom, *Script. rer. German.* ii. 332, according to which Margrave Otto of the Arrow (+ 1308) said to Bishop Günther of Magdeburg, who released him from prison for 4000 marks: "Thou knowest not how to fix the ransom of a margrave; I ought to have been seated on horseback with upright lance and to have piled gold and silver round me till the point of the lance was no longer to be seen." In Africa too there are examples of the same way of measuring (which in Germany has given rise to the expression "*die Hülle und die Fülle*," for the skin of the murdered beast was sometimes to be filled as well as covered by the offender), for Laing (*Travels through the Timanee*, &c.) relates that the followers of some Timanee chieftains are obliged to supply them yearly with as much rice as will cover them from head to foot when they are standing upright. Lastly, one may compare the price of the cat in the Russian fairy tale with Jain (in one version of "The Son of the Widow" in Campbell's *Tales of the Western Highlands*), who bought a cow for as much gold as would cover it from nose to tail.

Not less remarkable is the Russian tale (p. 168) which begins by telling how two old people were childless for a long time: "At last the husband went into the forest, felled wood and made a cradle. Into this his wife laid one of the logs he had cut, and began swinging it, crooning the while a rune beginning: 'Swing, blockie dear, swing.' After a little time, behold! the block already had legs. The old woman rejoiced greatly, and began singing anew, and went on singing until the block became a babe." This is apparently the same tale as that Gubernatis notices (*Zoolog. Myth.* i. 408), a parallel to which, in the Finnish epic *Kalevala*, was mentioned before (*Acad.* iv. 225) "as an echo of the widely spread custom of supplying the place of a lost or wished-for child by a doll or a gourd." We have here an additional example of the liveliness of the fancy amongst the grown up children of savage times (cf. Tylor, *Early History of Mankind*, p. 108, 2nd ed.). In like manner the Ostjak women on the Obi make room in their bed for three years for a log of wood representing their deceased husband.

In this connection there are other passages of the *Kalevala* that might be quoted, e.g. where Kullervo says to his father (Schiefner's translation, p. 217): "(Ich) werde auch um dich nicht weinen,—Höre ich, dass du gestorben;—Werd mir einen Vater machen,—Mund und Kopf aus Lehm und Steinen,—Augen aus des Sumpfes Beeren,—Seinen Bart aus dürren Stoppeln,—Füsse ihm aus Weidenzweigen—Fleisch ihm aus verfaulten Bäumen." The most ancient idols, as is well known, were nothing but rough logs; thus *Jupiter Tigillus* (August. *De Civ. Dei*, vii. 1), i.e. Jupiter the beam, or Jupiter worshipped in the form of a beam of wood; so the *Δακρυα* of Sparta, and Festus observes in general: "Delubrum dicebant fustum delibatum, hoc est, decorticatum, quem venerabantur pro deo." See also Otfried Müller, *Archæologie*, &c., p. 47 (1st ed.), and Tylor, *Prim. Cult.* ii. 151. Even the famous *Irmensäule* destroyed by Charlemagne was originally nothing but a "truncus ligni." Grimm, *Mythol.*, p. 106. In another place, where Ralston (p. 159) tells how "a girl obtains from her father a rough dress of pig's skin and two sets of gorgeous apparel; the former she herself assumes, in the latter she dresses up three *Kuklui*, which in this instance were probably mere *blocks of wood*," he is no doubt perfectly right. But he is less so, it seems, where in a note upon another version of the same story he says (p. 161): "The germ of all these repulsive stories about incestuous unions, proposed but not carried out, was probably a nature myth akin to that alluded to in the passage of the *Rigveda* containing the dialogue between Yama and Yami—'where she (the night) implores her brother (the day) to make her his wife, and where he declines her offer because, as he says, they have called it sin that a brother should marry his sister.' Max Müller, *Lectures*, sixth ed. ii. 557." We are in no wise dealing here with a nature myth, for the *ἐπικοινῶς μίξις*, even between the nearest relations (parents and children, brothers and sisters), was a general custom in the primitive age, and was still to be met with at a later date amongst the Macedonians, Greeks, Alani, Hibernians, Arabs, Persians, Egyptians, &c. (v. Strabo, pp. 201, 735, 783; Justin xi. 9; Arrian, *Exp. Alex.* ii. 11; Bachofen, *Mutterrecht*, Stuttgart, 1861, p. 368). Plato (*De Rep.* v. 461) sanctions the marriage of brother and sister, and the "incestuous unions" so frequent in mythology are only a reminiscence of a once general custom transferred to the company of the gods (cf. Braun, *Naturgeschichte der Sage*, München, 1864, p. 476). As late as towards the end of the seventeenth century it was allowable on the Gaboon for the son to marry his mother, and the father his daughter (Bastian, *Rechtsverhältnisse*, &c., Berlin, 1872, p. lxi). Those "incestuous unions" so often spoken of in legends and fairy tales are thus in no way nature myths, but rather echoes of primitive culture, and Ralston's quotation from the *Veda*, where the sister offers to marry her brother, and he rejects the proposal as sinful, is itself such an echo, only belonging to a time when such marriages had been already declared to be sinful. We see here again how cautious one has to be in deriving legendary traits from supposed nature myths, a point on which I have already insisted above (*Acad.* iv. 223). In the same place (p. 225), however, I was also able to confirm the justice of Gubernatis' remark, "that the worship of the bull and cow was widely spread even among northern nations," by referring to Holmboe's treatise, and we now understand the bearing of the passage from a Russian tale given by Ralston (p. 183) where we read: "The princess went into the open field, bowed down before the cow's right foot and got plenty to eat and to drink and fine clothes to put on." Further on (p. 295) we find a fairy tale which Ralston rather prosaically characterises as "one of those tales of the Munchausen class," but which Uhland (*Schriften zur*

Dichtung und Sage, iii. 213 ff, especially p. 223 sqq.) thought worthy of full and ample and at the same time poetical treatment. In the Russian tale there is amongst other things a mill that "grinds pies and pancakes;" similar magic mills, amongst which the mill *Grotti* of Snorri's *Edda* belongs, and which always have a mythical origin, are met with constantly in popular tales and songs. I have treated the subject in Benfey's *Orient und Occident*, ii. 275 sqq., and add here some further references; namely, an Icelandic tale in Arnason's *Islenskar Thiodhsögur*, &c., Leipzig, 1864, ii. 9, "*Maladhu kvorki malt nè salt*"; a Swedish legend in Berg and Gaedeken's *Nordiske Sagn*, Kjöbenhavn, 1868, p. 22, "*Hulen ved Sandsbygd*"; Widter's *Volkslieder aus Venetien* in the reports of the phil. hist. class of the Vienna Acad., vol. xli., p. 313, No. 78, "*La Superba Mantovana*" (with the note, p. 354); Uhland's *Volkslieder*, No. 32, "*Goldmühle*" (with the note in *Schriften*, iv. 34); Erlach's *Volkslieder der Deutschen*, Mannheim, 1834, i. 137, "*Die Sproede*"; Tarbé, *Romanero de la Champagne*, Reims, 1863-4, ii. 127; Bernoni, *Canti popolari Veneziani*, Venezia, 1873, *Puntata* xii., p. 15; Chasiotis *Συλλογὴ τῶν κατὰ τὴν Ἑπείρον δημοτικῶν ἀσμάτων*, Ἀθήνησι, 1866, p. 33, No. 12, p. 53, No. 43.

It will be apparent from the above remarks that quite apart from the subject matter of the tales, and their counterparts in other countries, which Ralston occasionally notices, but proposes to examine more in detail at a future time, the incidental traits given are of considerable importance, especially in reference to that part of the general history of civilization which deals with manners, customs, and popular beliefs, and that from this point of view also the collection is well deserving of attention. Ralston has not stopped short with translating, but has provided each section (Mythological, Magic and Witchcraft, Ghost Stories, Legends) with a very valuable introduction and the whole work with an equally attractive "Introductory Chapter," in which he shows the relation of Russian popular tales to Russian life, sentiment, and humour, and illustrates them by stories selected for that purpose. Here, as in the *Songs*, he has fully reached his purpose of interesting the general reader in these tales "and through them in the lives of those Russian men and women of low degree who are wont to tell them, those Russian children who love to hear them." But besides the general reader, the learned and literary student will, as we have seen, derive much profit from this book, which, independently of the fifty-one literally rendered tales, contains numerous summaries, in giving which the author aspires to have also kept closely to the text. Only so can such works possess a scientific value. We await with impatience the fulfilment of the author's promise, which we give in his own words: "Besides the stories about animals, I have left unnoticed two other groups of skazkas—those which relate to historical events, and those in which figure the heroes of the Russian 'epic poems' or 'metrical romances.' My next volume will be devoted to the *Buildinas*, as those poems are called, and in it the skazkas which are connected with them will find their fitting place. In it also I hope to find space for the discussion of many questions, which in the present volume I have been forced to leave unnoticed."

FELIX LIEBRECHT.

LITERARY NOTES.

In the *Revue des deux Mondes* (September 1) M. Renan notices the large work on *La Kabylie et les coutumes kabyles* by General Hanoteau and M. Letourneux, recently published at the *Imprimerie Nationale*. Of the five historical marks (a language, a literature, a religion, a history, and a legislation peculiar to themselves) which M. Renan treats as constituting the individuality of a race, two only, language and legislation,

are found in their purity amongst the Berbers—a name including not only the Kabyles and Touaregs, but all the Saharian tribes, from Senegal to Nubia, that are not of negro or Soudan origin. They have also, what is wanting to some more distinguished races, an alphabet of their own, a character little used, and curiously enough, chiefly known and preserved by women. The native legislation of the Kabyles, which has resisted even the power of the Koran code, is on the same model as that of all the primitive democracies described by Sir Henry Maine. The *djemâa* or village community is the social unit, custom is all-powerful, and stands as usual in such cases both for law and morality, the latter of which is not altogether a loser by the confusion. Charity, hospitality, and good faith are Kabyle virtues, the last especially being honoured in the *anaïa*, an institution in some ways resembling that of patron and client, but that the responsibility of the patron extends from himself to his family, tribe, village, and any other confederation of which he is a member, such as the *cof*, a quite peculiar and less praiseworthy kind of voluntary association, merely factious in origin and kept up chiefly by personal intrigues.

In the same number M. A. Geoffroy regrets the conservative bias of M. Charles de Ribbe's new book, *Les familles et la société en France avant la Révolution*, and hopes that he will shortly publish *in extenso* some of the valuable materials upon which it is founded. These are the so-called *Livres de Raison*, the family chronicles, half memoirs, half account books, which it was the custom of grave and prudent fathers of families down to the eighteenth century to keep for their own satisfaction and the instruction of their posterity. M. de Ribbe quotes one of the fifteenth century written in Provençal, in grave notarial style, one of the sixteenth century kept by a *métayer* peasant; that of the family of Garidel at Aix, which gives the history of five generations of influential citizens of the professional class, and many others of equal interest and importance for the history of society in the Provinces. The comparative rarity of such domestic acts, except amongst the Latin races, points to a direct descent of the *Livres de Raison*, or the Italian documents of which Guicciardini's *Ricordi* is a sample, from the *tabulae, rationaria, &c.*, of the ancient Romans.

In *Fraser* for this month Mr. W. M. Hennessy translates from the Leabhair Brach, an Irish MS. of the fourteenth century, a very interesting legend entitled the Vision of MacConglinny. The narrative professes to rest partly on oral tradition, and partly on the books of Cork, which are appealed to repeatedly to correct errors in the popular version. It is concerned with a scholar of the eighth century who delivered a contemporary king, Cathal by name, whose obit is fixed by the Chronicles, from an animal called a Lon-craes which had established itself inside him, being generated by certain enchanted apples, and caused him to devour food to such an extent as to menace Ireland with ruin. The cure was accomplished by keeping the king at first by stratagem at last by force for three days without food, while MacConglinny described dainties, till at last the Lon-craes was induced to come out, after which it was treated in a way that would have burnt it to death if it had been combustible, and finally departed after some impotent maledictions. The translator observes that the story is a decisive proof that M. Gaidoz is right in thinking that Gargantua is not a pure invention of Rabelais, and goes on to the very doubtful inference that he is only an exaggeration of Cathal. The story is full of purely mythical elements, the meaning of some of which, e.g. the cloaklet of Machin, has been entirely forgotten by the narrator. Its chief historical value is that it presents us with a kind of image of a period when Christianity was turned into a Celtic Magic. The position of the scholar reminds us very much of that of the half fabulous sages who are placed by Hindu tradition at the beginning of Indian history.

The *Cornhill* contains the beginning of one of Miss Thackeray's Modern Fairy Tales. It is a real stroke of genius to turn the beans for which Jack sells his mother's cow into shares in the *Excelsior* newspaper—an organ for the agricultural labourers.

The Danish novelist, H. F. Ewald, whose *Scotch Woman at Tjele* we reviewed at length some months ago, has just fin-

ished another romance, *Agatha*, which will be published in Copenhagen in October. The first half of this book has come into our hands in sheets; it deals with essentially modern questions, especially with the growth of socialism in Denmark.

The Rev. A. B. Grosart, of Blackburn, is about to publish by subscription the complete poetical and prose works of George Herbert, and he has recently announced several important discoveries which justify us in looking for a very satisfactory edition of the writings of this popular English classic. Among these are a MS. of fully one half of "The Temple," Herbert's best known work, with the author's additions and corrections, and six unpublished English poems; two unpublished sets of Latin poems, entitled *Passio Discerpta*, and *Lucus*, in Herbert's autograph, and his own autograph copy of *Triumphans Mortis* and another Latin poem; and a MS. "containing the Orations and public Letters of the Public Orator of the University of Cambridge from 1616 to 1636, thus covering the entire period of Herbert's holding the office." This last will be of special value for the memoir of George Herbert, with which Mr. Grosart intends to introduce this important addition to his excellent "Fuller's Worthies' Library." Translations of the Greek and Latin works and an English glossary will be given, and the text, which has appeared in a sadly corrupted form in all modern reprints, restored to its original purity.

Art and Archaeology.

WORKS IN THE ROMAN CATACOMBS.

THE long continued activity and opulent results of researches in the subterranean cemeteries called "Catacombs," may rank among the events signaling the pontificate of Pius IX.; and still more noticeable, as addressing a wider range of students, is the literature illustrative of Christian antiquity called forth from the Roman press, and supplied with subject-matter, by those well-aimed undertakings. The contributions of the late Jesuit Father, Marchi, and those more extensive and generally known from the pen of the Chev. de Rossi, need not here be praised. Two works by the latter, his *Inscriptiones Christianae* and *Roma Sotteranea*, are the fruit of labours pursued, and present the material collected by the learned author, during twenty-one years. Great cause was there to regret the long suspension of the explorations in those hypogaea consequent on the change of government in Rome. I need not here consider the validity of the excuses made for this, or of the reasons attributed to a Pontiff so generous as Pius IX. has shown himself with respect to public works and antiquarian researches, for discontinuing the funds long supplied out of his bounty for *scavi* in the field referred to. Proportionate to regrets at the suspension was the satisfaction naturally felt at the renewal of those explorations, which, after an interval dating from the spring of 1870, ensued in the November of 1871. All that has been accomplished and discovered since is reported in the successive *fascicoli* of De Rossi's *Bullettino di Archeologia Cristiana*—see especially No. IV. of the new series, third year.

The new impulse given to undertakings and studies fortunately bearing precious fruit, in the subterranean cemeteries around Rome, may be dated from the discovery, in 1844, by Padre Marchi, assisted by the then young De Rossi, of ingress into those hypogaea near the Appian Way, known as the "Catacombs of S. Callisto"—followed in 1845 by the discovery, through the exertions of the same individuals, of the alike long-forgotten entrance to a cemetery called after two martyrs, Protus and Hyacinthus, there interred. Thenceforth labours in the same sphere were more systematically prosecuted; with encouragement and assistance from the newly-elected Pope. From 1849 to 1851 the works in two systems of underground corridors and chapels were directed by De Rossi, a monthly assignment for the costs being secured by Pius IX. Presently was ordered by His Holiness an "Apostolic Visitation of the Catacombs;" and finally, in November, 1851, was created a "Commission of Sacred Archaeology," which soon began its task of directing and superintending the *scavi* in that range. This committee, presided over by the Cardinal Vicar, and in imme-

diate dependence on the Pope, has never been dissolved, nor have new authorities interfered with its action; but we hear of its financial distresses as cause of suspension to its proceedings in late years.

There is no little reason for surprise and regret at the comparative neglect in which certain of the most interesting of the subterranean cemeteries, with contents known to be most valuable, have been left since their re-opening at more or less recent dates—e.g. that originally named after the Persian martyrs Abdon and Sennen, whose bodies were brought to Rome and there interred in the fourth century; but which cemetery is now known as "Catacombs of S. Ponziano," from Pontianus, bishop of this see A.D. 230 to 235. In the excavations so-named, we see the most finely characterized and about the best preserved among wall-paintings hitherto discovered in any of the underground oratories or burial places.

The works resumed as I have stated, have been principally in the two hypogaea entered near the Appian Way, one named after a patrician family, Praetextatus, the other after S. Callixtus, bishop of the Roman see A.D. 219-223; this last "Catacomb" being supposed to owe its origin to Zephyrinus, immediate predecessor of Callixtus in the same bishopric. It is of historic importance as the place of sepulture for the Roman bishops during the third century, also as the first cemetery which belonged not to any private person but to the local Church in her aggregate capacity, and as the arena chosen for the most solemn festivals of martyrs during at least the whole of the fourth century. Whatever is undertaken in this most promising soil may be deemed of interest, and expected to lead to more or less valuable results; but I am not aware that the latest pursued labours here have yet secured any very rich reward. More noticeable have been the recent *scavi* in the "Catacomb of Pretestato," as to the precise origin of which, and the connection of the ancient Praetextatus family with it, we know little, though now assured that it contains the bodies of martyrs who suffered so early as A.D. 161 and 162. The remarkable characteristic of this cemetery is that much of its interior is *architectural*, of regular and in some parts perfectly preserved construction, not merely excavated in the tufa rock, as are other such cemeteries. At one extremity there has evidently been a front, built in brickwork of about the best antique Roman style, and opening on a road, or else on the level Campagna, near the Appian Way. Analogous details are observed in the supposed most ancient section of the cemetery named after Nereus and Achilleus, martyrs who were servants of Flavia Domitilla, the grand-niece of the Emperor Domitian, and who suffered under Trajan. That part of the excavated area which is called after Domitilla herself has a façade, a vestibule (or atrium), and a small chamber on one side provided with a well, no doubt used for baptism, all in antique brickwork, and opening upon what was evidently a road, though now filled up, deep below the surrounding Campagna, near the Via Ardeatina. These unusual details, in the two cemeteries in question, attest the absolute publicity of the hypogaea serving for Christian use, and lead us to infer that neither the funeral rites nor such acts of worship as took place therein were secret, nor under any necessity of concealment owing to the social conditions of the Church at Rome. Evidence to like effect is before us in the so-called "Catacombs of S. Januarius" at Naples. The exaggerated reports of the persecuted and normally depressed state of the Church under the sway of heathen emperors, are rectified by such convincing testimony. We know that Valerianus, with excess of intolerance, forbade the Christians to enter their cemeteries for any purpose whatever; but that this prohibition was withdrawn by Gallienus (his successor, A.D. 261), who restored those burial places to the bishops—thereby acknowledging them as public property of the Church. Another remarkable example of construction as well as decoration in the Praetextatus cemetery, is a spacious and lofty hall, entirely built in brickwork, and adorned with wall-paintings classic in style and quite devoid of sacred character and symbolism—the subjects, vintage scenes amidst flowers and foliage, with little winged genii (perhaps intended for the personified seasons) reaping corn or gathering grapes. We might here fancy ourselves in a heathen chapel or mausoleum, but are reminded of Christian consecration by a pleasing and well-designed figure of the Good Shepherd painted in a recess over one of the sepulchral *loculi*, recognised through a well-traced epitaph on a tablet found

near, and identified as the tomb of Januarius, a deacon and martyr who suffered A.D. 162. This cemetery was formerly called by that martyr's name, he being one of the seven sons of Felicitas, all, together with their mother, put to death for their faith. There is mention of a small basilica and other buildings, probably for the residence of the clergy, near the entrance to the sacred place. De Rossi shows that the statements in church history as to bishops or priests residing "in cemeteries" may be generally understood to imply that they dwelt in such buildings *above*, not in subterranean places *within*, the excavated regions. The notion that under pressure of persecution numbers of Christians lived, for safety's sake, in such hypogaea must be rejected—not but that, in extremities of danger, some may have taken refuge in these underground retreats. It is known that certain of the Roman bishops did so conceal themselves in early times.

Other works were commenced last winter in the cemetery near the Salarian Way, named after Thrason and Saturninus, martyrs of whom we know nothing but that they were among the victims of the Diocletian persecution. It is conjectured by Marangoni that these hypogaea were made by the Christians condemned by Maximianus, during that same persecution, to dig for clay wherewith to build the *thermae* dedicated in the name of the former emperor. The cemetery on the Salarian Way has been hitherto little known or explored, though containing many paintings and epigraphs of interest, and an unusual number of those supposed portraits of the deceased in act of prayer with outspread arms—hence called *orantes*. A rarer work of art is a mosaic, with brilliant tints, of several birds (all, no doubt, here introduced as symbolic or mystic) on a disk set into the tufa rock low down beside one of the tombs in a corridor.

Another undertaking of *scavi* carried on not by public or official but private enterprise, and with many interesting results, is in a section of the cemetery of S. Agnes near the Via Nomentana, and entered immediately below the extramural basilica of that saint. These works were commenced nearly two years ago, at intervals suspended and resumed, by the monks (Lateran Canons) of the adjacent monastery, restored for the service of that church by Pius IX. The section of the cemetery thus re-opened is at some distance from the long since known and frequently visited "Catacombs of S. Agnese," though undoubtedly belonging to and communicating with those very extensive hypogaea, which were first thoroughly explored and described (in recent time) by Padre Marchi. The lately discovered corridors and chapels extend in labyrinthine ramifications through which it would be impossible to find one's way without an experienced guide. They comprise three storeys, accessible both from the tribune of the basilica and from the neighbouring S. Costanza—that curious circular church originally erected as a mausoleum for the daughters of Constantine, and the only one of that emperor's numerous buildings for sacred use that still stands in or near Rome. No paintings had been found in this section of the vast cemetery up to the time I last visited it (in the winter of the present year); but the numerous epigraphs, and the evidence, in lapidary style here before us, of ancient origin, deserve to be studied. The Latin epigraphy of successive centuries may be distinguished by all practised eyes; and those versed in such studies have agreed that many of the inscriptions seen here are of the second, that not a few may be referred to the first century of our era—the large clearly incised letters, and the general absence of later-adopted Christian formulae, alike attesting such early date. Several Christian symbols and monograms, especially that of the Holy Name known as the monogram of Constantine, are seen incised on various tombstones. Another memorable circumstance, and one which has given rise to conjectures, is the connexion between the subterranean burial places and excavations, different in form from the Christian oratories—namely, two vaulted chambers with the usual recesses for cinerary urns, but where no paintings or inscriptions have been found, though the character and purpose are at once recognisable as heathen, and for heathen sepulture alone. The inference that both Christians and Pagans at the same time used the same cemeteries for their dead, and scrupled not to perform their funeral rites thus promiscuously, is (I believe) neither corroborated by what we see before us in this instance nor by any other monumental proofs; indeed, contradicted

C. I. HEMANS.

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in use was the first work of the late medallist in his official capacity, and the Great Seal of Canada, which is remarkable for its artistic merit, is also one of his works.

The only medal awarded to British exhibitors of sculpture in the Paris Exhibition of 1867 was bestowed on the late Mr. J. S. Wyon and his brother, who exhibited with him.

The invaluable collections of books, prints, and manuscripts at Windsor Castle are, we learn from the *Times* of the 6th inst., to be protected from one of the most serious casualties to which such treasures are exposed by the Royal Library and Print-room being rendered fireproof. It is to be hoped also that the statements made in a recent letter to the *Times* concerning the insecurity of the National Gallery against fire will be promptly investigated and all necessary precautions taken. It is alarming even to contemplate such an accident as the destruction by fire of our fine National Collection, particularly as the precaution has not been taken, as at Munich, of marking those pictures which in case of such an event should be saved first. Some few of our national pictures might, it must be owned, with advantage be left to the flames.

The *Zeitschrift für bildende Kunst* again gives us one of W. Unger's fine etchings from the Cassel Gallery. This time it is the so-called Woodcutter's Family by Rembrandt that is reproduced.

Sir John Lubbock's Bill for the preservation of public monuments will be again taken up next session. The great difficulty will be its interference with private property. An Englishman's land is as sacred as his house, and the Commissioners can have no more power over one than the other unless armed with an almost Star-Chamber authority. It little avails to address the English landholder in the style of the circular of the French Commissioners, which sets forth—"they should understand that the preservation of ancient monuments interests as much as it honours them, by offering an additional attraction to the meditations of the historian or the curiosity of the traveller." How set forth such considerations to the proprietor, for instance, of Cæsar's camp at Wimbledon, now placarded as to be let on building leases? how set national honour against money's worth? Nothing remains to Government but the system of purchase by compulsory sale, as in the case of property required for railways and other public works.

The French Commission, which was appointed in 1830, receives an annual grant; the Commissioners, however, do not furnish the whole expense of restoration themselves, but grant a portion to the communes. They began by addressing a circular to the prefects, desiring them to furnish a list of the nature and state of the monuments in their several departments, what churches contained tombs, mural paintings, statues, &c., deserving of reparation, and prohibiting any restoration without their authority. Their powers extend to the restoration of all churches, châteaux, amphitheatres, &c., in any way deserving the name of "monuments historiques," and during the last forty years they have expended forty millions of francs (£1,600,000) on their works. A magnificent volume, forming the first livraison of their transactions, has been lately published.

The most eminent of Swedish sculptors, J. P. Molin, died at Waxholm on the 29th of July. His remarkable group of two men fighting a duel within one belt, exhibited here in 1862, will be readily recollected. He was a pupil of the Danish sculptor, Bissen.

New Publications.

- BROWN, T. Allston. History of the American Stage, 1733-1870. New York.
 FRENCH HOME LIFE. (Originally published in *Blackwood's Magazine*.) Blackwood.
 HARTMANN VON AUE, Gregorius von, mit vollständigem kritischen Apparat hrsg. von H. Paul. Halle: Lippert.
 LA FONTAINE, Nouvelles œuvres inédites de, publiées par M. Paul Lacroix. Paris: lib. des Bibliophiles.
 LONGFELLOW, H. W. Aftermath. Routledge.
 LÜDERS, O. Die dionysischen Künstler. Berlin: Weidmann.

OWEN, Hugh. Two Centuries of Ceramic Art in Bristol. Bell & Co.
 PHILIPPSON, E. Der Mönch von Montaudon, ein provenzalischer Trobadour. Sein Leben und seine Gedichte bearbeitet und erläutert. Halle: Lippert.

SCHICK, M. Joh. Sebastian Bach; e. musikal. Lebensbild aus der ersten Hälfte d. 18 Jahrh. Reutlingen: Baur.

Physical Science.

Jottings during the Cruise of H.M.S. *Ouragoo* among the South Sea Islands in 1865. By Julius L. Brencchley. Longmans, Green & Co.

TOWARDS the end of May, 1865, Mr. Brencchley, who was then at Sydney, was afforded, through the courtesy of the commodore of H.M. steam frigate "*Curaçoa*," the opportunity of accompanying that man-of-war on a cruise, the main object of which was to carry the British flag in the different archipelagoes of the Western Pacific.

Leaving Sydney early in June, 1865, the course taken was to Norfolk Island, passing north of the Kermadac group, touching at Savage Island; at the Samoa Islands; south to the Friendly Islands; then to the Fijis, by the New Hebrides to the Solomon Islands; on the way back calling at New Caledonia, and from thence to Sydney. The time occupied in this interesting tour was four months; of which probably much more than one half was spent on the sea, and it reflects great credit on the zeal and assiduity of the lamented author of this work that in so short a time he should have accomplished so much; and the recollection of this fact will save some perhaps from feeling disappointed at finding many matters of importance concerning these South Sea Islands very briefly alluded to or altogether passed over.

The author was an enthusiastic traveller, and by no means a bad collector, yet he lacked in great measure that important qualification of a collector which consists in having a more or less intimate knowledge of the objects to be collected. Thanks to the well-known biologists who, in the elaborate and beautifully illustrated appendices to this volume, describe the chief portions of Mr. Brencchley's natural history collections, science has not lost by this, but on the contrary, has greatly benefited by the collections made during the cruise. It must, however, be confessed that as a rule we miss in these jottings records of the habits and manners of the animals seen; and when we remember that the collections were for the most part named at the time these notes were printed, we read with no little astonishment sentences like the following, which are supposed to describe the birds and mammals of so seldom visited a place as Cook's Savage Island:—"There exists but one indigenous mammifer in the island, a small rodent, of a size between a water-rat and a mouse. I must not, however, pass over a great bat, which I saw flying at a remarkable height. With the exception of fowls, which are reared everywhere, there are but few birds; among them are pigeons or doves of a green colour, parrots, a pretty little green bird with white feathers under the tail, a small martin or swallow, the tropic bird or the boatswain." And again, "not a venomous reptile is to be found, and even the centipede is unknown" (p. 26). One would smile at this description if it came from the pen of some ship's captain, anxious to tell what he saw, but unable to do so; it is tantalizing, however, to have the like from a man like the author. There was a time when we might have met with a description like the above in the journal of one of H.M.'s lieutenants, but we are happy to think that the interest taken in science by the officers of our navy has at present so much increased that no such suspicion could now cross our minds. Moreover some of the extracts from Lieut. Meade's diary are among the best matter and most interesting descriptions in the book.

So little comparatively is known about the Solomon and New Hebrides groups, that even the little information afforded by these jottings is most acceptable. The latter group of islands was the first visited. Anatom, one of the smallest of the group, contains about 2,200 inhabitants, but this island had been devastated by three fearful epidemics. The natives are docile, eager for knowledge, and, judged by the British standard, a moral race. Some cotton, a little arrowroot, and a few thousand pounds of French beans form, with whale oil, their only articles of export. Tanna, another island of the group, was next visited, but only for the purpose of burning a few villages and killing a few of the natives, as a punishment apparently for their having sent away their missionary; thus it happened that no scientific work was done there.

A very short visit of only a few hours was paid to Sandwich Island, and then they departed from the New Hebrides for a time, Eramanga being visited on the return voyage. The "Curaçoa" next dropped anchor in the Port of Vanua-Lava, one of Banks group. Only a day was spent here, touching for a brief interval at Vanikoro, an island rendered famous in geographical annals by the fate of Lapérouse's unfortunate expedition. After a few hours' stay at Santa Cruz, the "Curaçoa" made for the Solomon group. The small islands, Ulakua, Florida, and Uji, were only just visited, but a sojourn of a week on the north-east coast of San Christoval, the largest island of this group, and of three or four days at Ysabel, enabled the author to see something of the inhabitants, and to add very considerably to his natural history collections.

The natives of Ulakua are said to be a puny race of very excitable nature. They have thick bushy woolly hair, stained yellow with lime, and persons of both sexes wear nothing beyond a narrow waist-band. At Uji a village hall was visited, the ornamentation of which consisted of designs painted in various colours; some of the storey-posts being carved to represent a human figure, and the tie-beam bearing carvings of fishes and birds. The islanders were not seen, but it is to be hoped that we may ere long know something more of a people who, call them savage if we will, have, as is evident from specimens of their decorative work given in the two plates in this book, risen to an appreciation of artistic taste.

Some curious designs were also found on the front of houses at a village on San Christoval; one of these, of which a sketch is given, represents a man wearing a hat curiously like those used by Europeans. As however such hats are not worn by sailors, it must be doubtful if these sketches are the work of native artists.

The Solomon group was quitted on 10th September, and the "Curaçoa" shaped her course towards Eramanga, distant some 900 miles. The voyage was an unpleasant one, the ship rolling much in the rough weather they encountered, and a good many of the dried plants were lost. After a fortnight they cast anchor in Dillon's Bay, on the western coast of the island. It was not considered safe to land, but the ship's cutter was sent to the Bay of Sifu to take some soundings, when the master reported that he was fired at by a native from the shore. Mr. Gordon, the missionary, was sent to the two chiefs to desire them to visit the commodore. They declined to come, and the little village of Sifu was shelled—after which, "having nothing more to detain us," the "Curaçoa" weighed anchor, and put to sea, reaching Port de France in New Caledonia on the 30th September. A week was spent agreeably enough on the island. The Government Model Farm at Yahove was visited—all the work at which is done by convicts or disciplinaries; the latter being soldiers who, having committed some military offence, are sent out to the colony to complete their time of

service. Unfortunately no details are given of the crops grown at this station. It appears that next to nothing is known of the natives, and that as yet no native name has been found for the entire island.

Port de France was left on the 8th October, and Sydney reached after a stormy passage on the 13th.

Having now indicated the places touched at during the cruise, we need only direct the reader's attention to the valuable Natural History Notes appended to this volume. The birds are described by the late Mr. George Gray. No new species are described for the first time in these notes, but twenty-seven species are figured in plates from drawings by J. Smit. The fishes and reptiles are described by Dr. Günther. Nine reptiles are described with illustrations by Ford, while descriptions of fifteen fishes are given, and twelve are figured by the same distinguished artist. All the reptiles, with the exception of one, are described for the first time, and Dr. Günther gives a list of sixty-eight fishes from the Solomon group, eleven of which are here described as new species.

Of the invertebrates, the mollusca are described by the late Dr. Baird, and the insecta by Messrs. F. Smith and A. G. Butler of the British Museum. Thirty-three new species of testaceous mollusca and seven new species of hymenoptera are described and figured.

Nine species of Lepidoptera previously described by Mr. Butler are figured. E. PERCEVAL WRIGHT.

Notes on Scientific Work.

Geography.

Africa.—Dr. Kiepert, of Berlin, has published an interesting contribution to the history of discovery in Africa, in two sheets of maps with an explanatory paper. In one of these sheets he has reduced, to precisely the same scale, eight of the more important and distinctive ancient maps of Africa, beginning with Ptolemy's, about A.D. 130, and ending with Dapper's, of Amsterdam, in 1676. In these the gradual development of knowledge of the coastline of the continent may be clearly traced, until, after the great voyages of Diego Cam, Bartolomeo Diaz, and Vasco de Gama, it assumed nearly the true form; but in all these maps the interior has been filled up from hearsay with a network of anastomosing rivers generally more or less resembling and reproducing the Nile lakes and streams of Ptolemy. A second sheet of six maps illustrates the newer period of African geography, from the beginning of critical mapping by Dr. Anville in 1749, to the state of our knowledge at the present moment. In these the exterior coastline assumes a more and more perfect delineation, and in the interior, from which all fanciful geography of ancient times has been swept away, the slow march of actual discovery is made evident, creeping into and reducing the vast blank spaces which appear on the map, and closing round these till, in the last of all, there are but two large areas of which nothing is known. To the more important of these, the West African *terra incognita*, both the English Livingstone-Congo Expedition and the German party of discovery have turned, and lines of information may soon be obtained through the very heart of this great blank. The scheme of the traveller Rohlfs, about to be carried out, may also unveil the great unknown region of the Libyan desert.

Arctic Regions.—Continuing his admirable series of papers on the progress of Polar research Dr. Petermann has now given an account of the fifth Swedish North Polar Expedition, of 1872-73, as far as its work has yet advanced. It will be remembered that the party, fitted out in four ships by the Government and the Swedish Academy, under the leadership of Prof. Nordenskjöld, was according to the plan to winter near the Parry Islands (80° 40' N.) in the north of the Spitzbergen Archipelago, and to proceed thence by means of reindeer sledges over ice towards the Pole. In July of this year two transport ships of the expedition returned to Norway. The account they bring of the chief part of the expedition, though favourable as far as the well-being of its members is concerned, is one of almost complete failure in the geographical objects of the voyage. All attempts to reach the Parry Islands having proved fruitless, Mossel Bay, in 70° 50' N., was selected for wintering, and here a commodious house, brought from Göteborg, was erected. An early misfortune was the escape of the whole of the reindeer intended for use in the sledges, through the carelessness of the Laplanders who had charge of them. The winter however appears to have been passed safely, though the relief they gave to several badly-provisioned Nor-

wegian fishing vessels proved almost too great a drain on their supplies. Repeated examinations of the auroral light by means of the spectro-scope were made during the winter, and are believed to have led to very important results. The most extensive sledge journey yet accomplished by the expedition was undertaken from April to June in this year. In this the Parry Islands were reached, and an attempt was made to go thence northward over the hummocked ice. This failing, the party turned eastward along the coast of North-East land to its furthest extremity, and then ascending the high inland ice which covers this part of Spitzbergen, crossed the island in fifteen days, reaching Mossel Bay again on the 24th June.

[A careful *résumé* of the temperature observations taken during the voyage of the "Challenger" in the North Atlantic is now being prepared at the Admiralty for the ensuing meeting of the British Association at Bradford.]

Botany.

Movement of Stamens in *Portulaca*.—Prof. C. E. Bessey records in the *American Naturalist* for August a singular instance of irritability in the stamens of the two common American species of *Portulaca*, *P. grandiflora* and *oleracea*. If lightly brushed in any direction they immediately bend over with a strong impulse towards the point from which they were brushed, i.e. in the reverse direction to that in which the irritating body is moving, simple contact not appearing to produce the effect. The object of the motion seems to be that by this means the pollen from the stamens may become dusted on to the body of any insect which enters the flower in search of honey. In the nearly allied *Claytonia* there is no similar irritability of the stamens, but cross-fertilization appears to be secured in another manner by the stamens discharging their pollen and then bending back completely against the petals before the stigmas assume their receptive condition.

Composition of the Puff-Ball.—Professor Church contributes to the *Journal of Botany* for August a note on the composition of the common fungus *Lycoperdon giganteum*, known as the Giant Puff-ball, which he has found to be as follows:—

	In the fresh state.	Perfectly dry.
Water.....	90.89	
Fat, oil, and resinous matter	.90	11.00
Albuminoids.....	5.48	66.78
Cellulose or fungin, &c. ..	2.10	14.78
Ash or mineral matter....	.63	7.44

while an analysis of the ash gives the following results:—

	100.00	100.00
Phosphorus pentoxide	46.19	
Potash	35.48	
Soda	6.95	
Lime	2.47	
Ferric oxide	1.08	
Silica	0.66	
Other substances and loss	7.17	

The noticeable features of these analyses are the very large proportion of potassium phosphate in the ash, and of nitrogenous substances in the fresh plant. Prof. Church is however of opinion that a portion of the nitrogen is present in the form of nitrates, which would explain the singular phenomenon that in drying the fungus in a current of dry air scarcely above the temperature of boiling water, the whole mass was seen to glow and become converted into a black charred mass.

The Gymnospermy of Conifers.—Prof. Eichler, in a reprint from the *Regensburg Flora*, returns to this much controverted subject, and replies to the arguments of Strasburger in his recently published *Die Coniferen und die Guttaceen*, who maintains that the so-called "integument" of the seed of Gymnosperms has really the character of a pericarp or ovarian wall enclosing a naked nucleus. Dr. Eichler relies, for the correctness of the more prevalent theory, mainly on the analogy with the *Guttaceae*, where he considers it established that ovular structures are formed on leaves which must be considered as open carpels; and these ovules are clearly the analogues of the corresponding structures in Conifers, which must therefore be considered also as naked gymnospermous ovules. The *Cycadeae* would then be the prototype of Angiosperms with ovules produced on the carpels, the *Coniferae* the prototype of Angiosperms with ovules produced from the axis.

Zoology.

On the Geographical Relations of the New Zealand Fauna.—Capt. Hutton, in a paper read before the Wellington Philosophical Society in September, 1872, says that sufficient is now known to establish with great probability the main features in the zoological history of the New Zealand Islands. The fauna may be regarded as the remnant of a

continental fauna, and a close study of it will throw great light on many of the most important and at the same time most obscure problems in zoology. It will however be a long time before this can be accomplished in all its details, and in this paper the author contents himself with pointing out the principal facts that have to be accounted for and the deductions that may be drawn from them. Glancing at the geological and palæontological evidence, he suggests as an hypothesis that will best account for these phenomena: 1. That there was a continental period during which South America, New Zealand, Australia, and South Africa were all connected, though not at the same time, and that New Zealand became isolated before the spread of the mammals and from that time to this has never been completely submerged. 2. Subsidence followed, and the evidence then points to a second continent stretching from New Zealand to Lord Howe Island and New Caledonia and extending into Polynesia for an unknown distance, but certainly not so far as the Sandwich Islands. 3. Subsidence again followed, and New Zealand was reduced for a long time to a number of islands, upon many of which the moa lived. 4. This was followed by an elevation; these islands became connected, and a large island existed disconnected from Polynesia. 5. This was once more followed by subsidence, and the geography of New Zealand assumed somewhat of its present character. (*Trans. New Zealand Institute*, vol. v., pp. 227-256.)

New Zealand Fishes.—Capt. Hutton in his contributions to the Ichthyology of New Zealand describes and figures a number of new, rare, or but little known species. The figures, covering seven plates, are outlines of new species not described in Capt. Hutton's *Catalogue of Fishes of New Zealand*, 1872. We find *Neptomenus bilineatus*, *Ditrema violacea*, *Colloptilum punctatum*, and *Ammotretis güntheri*. A number of rare or scarcely known species are also described in detail from fresh specimens, and corrections of errors in the *Catalogue* of New Zealand Fishes are given. (*Trans. New Zeal. Instit.*, vol. v., pp. 259-272.)

African Reptiles.—In continuation of his Notes on Reptiles Prof. Barboza du Bocage describes three new species from the interior of Mossamedes: *Lepidosternon anchidæ* from the banks of the river Cunene, *Onychocephalus anomalus* and *O. petersii*, from Huilla and Biballa. There is also appended a list of the species of Typhlops in the Lisbon Museum. Of these, eight species are from Western Africa, and seven species are from other parts of the world. (*Journ. de Scien. Nat. Lisbon*, 1873, No. xv.)

Anthropology.

The Congress of Bologna.—The last number of the publication entitled *Matériaux pour l'histoire primitive et naturelle de l'homme*, iv., pt. 3, 1873, is almost entirely occupied with a report which, though tardy, will be very welcome, on the series of objects illustrative of Italian anthropology and prehistoric archaeology exhibited during the sitting of the Congress at Bologna in 1871. The writers, MM. Cazalis de Fondouce and Cartailhac, have followed, and to their regret could not well have done otherwise, the more convenient than satisfactory geographical order of arrangement which had been found necessary for the sake of keeping together the collections of many of the exhibitors. They begin with Sicily, and in giving it the first place they do not exaggerate its importance, considering its many caverns and grottoes which have yielded evidence first of a fauna more resembling that of Africa than Europe, as for example, the *Elephas Africanus*, and secondly, of remains of human industry associated with the bones of animals, as shown in 1850 by the researches of Falconer, Baron Anca, and Porcari. From Sicily they proceed to the volcanic island of Pantellaria with its cinerary urns of marble or terracotta occasionally containing coins with Phœnician characters, and with its peculiar habitations called *Sesi* which resemble somewhat in their construction the *Nuraghi* or round towers of Sardinia. M. Dalla Rosa thinks that these structures had been erected during the stone age; what led him to this opinion being the discovery of some pieces of obsidian more or less worked, and clearly destined to be used as instruments of some kind. Under the head of Sardinia we have, after a short notice of the Carthaginian settlements in the island, a very interesting account of the remains of the inhabitants during the primitive age, and possibly in part during their dependence under the Carthaginians as illustrated by the *Nuraghi*, the tombs and monoliths. The *Nuraghi* or round towers which exist in vast numbers throughout the island, are built of large blocks of stone, jointed and hewn, it appears, by means of bronze tools. They vary in height from 16-20 metres, and in diameter at the base from 12-35 metres. They contain two or three apartments one above the other and with access from one to the other by means of steps left in the wall. With regard to the tombs and monoliths, their age is determined by the discovery of objects in stone and bronze in or near them. M. Spano assigns some of the objects in stone to the archæolithic period, but the writers of the report dissent from his opinion, believing them to be neolithic. As yet there would seem to be no evidence of the island having been inhabited in the archæolithic age. What we know is that, towards the end of the neolithic period, it was inhabited by a people

who had reached that stage in which they were able to construct dwellings of the kind seen in the Nuraghi of the earliest type and in the tombs. In this stage they appear to have been brought into contact with the Phœnicians, a people accustomed to working in metal, and in search of districts where, as in Sardinia, a wealth of metals and minerals was to be found. Having learned from them the use of metal tools, the inhabitants of Sardinia were now able to construct their Nuraghi and tombs in a more perfect fashion. Of the presence and influence of the Phœnicians in the island many remains have been found. From the connection of Sardinia with the West of Europe during the stone age, and with the Eastern nations during the age that followed, the archaeology of the island offers a field for the study of prehistoric archaeology of more than usual interest. In a similar way the writers of the report proceed to examine the various collections from the islands of Palmaria, Pianosa, and Elba, and from the districts of Liguria, the Apennines, and the hills of Pisani.

New Publications.

- BARANELZKY, J. Untersuchungen ueber die Periodicität des Blutens der krautartigen Pflanzen und deren Ursachen. Halle: Schmidt.
- BUFF, H. Lehrbuch der physikalischen Mechanik. 2 Theil. 1 Abtheil. Braunschweig: Vieweg.
- DE KONINCK, L. G. Recherches sur les animaux fossiles. II. Partie. Monographie des fossiles carbonifères de Bleiberg en Carnithie. Bonn: Marcus.
- DE LONGUY, A. L'Age du bronze à Satenay (Côte-d'Or). Autun: Dejussieu.
- DITSCHNER, L. Ueber das Intensitätsverhältniss und den Gangunterschied der bei der Beugung auftretenden senkrecht und parallel zur Einfallsebene polarisirten Strahlen. Wien: Gerold's Sohn.
- DUBALEN, P. E. Catalogue critique des oiseaux observés dans les départements des Landes, des Basses-Pyrénées et de la Gironde. Bordeaux: Coderc et Degréteau.
- ERDMANN, Prof. Darwin's Erklärung pathognomischer Erscheinungen. Halle: Schmidt.
- GENERAL-BERICHT ueber die europäische Gradmessung für das Jahr 1872. Zusammengestellt im Centralbureau. Berlin: Reimer.
- GÜNTHER, E. Darstellung der Näherungswerte von Kettenbrücken in independenter Form. Erlangen: Besold.
- LANGENBACH, G. Die Meeresalgen der Inseln Sizilien und Pantellaria. Berlin: Weber.
- LERCH, P. Khiva. Seine historische und geographische Verhältnisse. St. Petersburg: Röttger.
- LÉVY, P. Notes sur une nouvelle carte du Nicaragua et sur les projets de percement du canal interocéanique. Abbeville: Briez.
- MOHNIKE, O. Die Cetonen der Philippinischen Inseln. Berlin: Nicolai.
- MULSANT, E., et REY, C. Histoire naturelle des Coléoptères de France. Lyon: Pitrat.
- NEUMANN, C. Die elektrischen Kräfte. Darlegung und Erweiterung der von A. Ampère, F. Neumann, W. Weber und G. Kirchhoff entwickelten mathemat. Theorien. 1 Theil. Leipzig: Teubner.
- PAINVIN, M. Étude analytique de la développable circonscrite à deux surfaces du second ordre. Lille: Danel.
- PERIER, J. A. N. Des races dites berbères et de leur ethnogénie. Paris: Hennuyer.
- POUZE, M. l'abbé. Groupe de dolmens et demidolmens des environs du Mas-d'Azil (Ariège). Montauban: Forestié.
- PROCTOR, R. A. The Moon: Her Motions, Aspect, Scenery, and Physical Condition. Longmans.
- ROSENBUSCH, H. Mikroskopische Physiographie der petrographisch wichtigen Mineralien. Stuttgart: Schweizerbart.
- SCHORR, F. Der Vorübergang der Venus vor der Sonnenscheibe am 9 December, 1874. Braunschweig: Vieweg.
- SECCHI, P. A. Sulle Stelle Cadenti del 27 Novembre, 1872, e la teoria generale di questi fenomeni. Roma: Refain.
- SENATOR, H. Untersuchungen ueber den fieberhaften Process. Berlin: Hirschwald.
- STREINTZ, H. Ueber die Aenderungen der Elasticität und der Länge eines vom galvanischen Stromes durchflossenen Drahtes. Wien: Gerold's Sohn.
- TARAMELLI, T. Sui prodotti Vulcanici. Udine: Seitz.
- THORPE, T. E. Quantitative Chemical Analysis. Longmans.
- URLINGER, F. 20,000 Höhenbestimmungen der Berge der oester.-ungar. Monarchie. Wien: Mayer.
- VON GERICHTEN, E. Ueber Selensäure und ihre Salze. Erlangen: Besold.
- VÖCHTING, H. Zur Histologie und Entwicklungsgeschichte von *Miriophyllum*. Jena: Frommann.
- WALTER, A. Untersuchungen ueber Molecularmechanik nach analytisch-geometrischer Methode als mathemat. Grundlage der chem. Statik. Berlin: Calvary.
- ZAUGERLE, M. Lehrbuch der Mineralogie. Braunschweig: Vieweg.

History.

Bibliotheca Rerum Germanicarum edidit Philippus Jaffé. Tomus Sextus: Monumenta Alcuiniana a Philippo Jaffeo praeeparata ediderunt Wattenbach et Duemmler. Berolini apud Weidmannos. 1873.

HISTORICAL scholars will not object to a new edition of Alcuin's letters, although it forms part of a collection of materials for early German history. According to the plan of the late lamented Dr. Jaffé, an Alcuin volume was to be added to his *Monumenta Corbeiensia, Gregoriana, Moguntina, Carolina, and Bambergensia*. Nearly two thirds of it were completed, when his sudden death stopped the work early in the spring of 1870, and the melancholy duty of completing the rest devolved upon two of his friends. There is hardly a task more tiresome and at the same time more ungrateful than editing and printing from another man's manuscripts and collations. But in this case particularly a vast mass of Jaffé's materials had to be examined over again in order to establish the text with the same minute diplomatic exactness which he was anxious to attain, innumerable quotations had to be hunted up, and the dates to be settled as far as it is possible to do so. Consequently the two posthumous editors have had much more to do than merely to superintend the printing of the volume.

Professor Wattenbach is the co-editor of the first portion, which contains the life of Alcuin (written by a monk of Ferrières in Anjou between 823 and 829), Alcuin's own *Vita S. Willibrordi*, and his well-known *Carmen de pontificibus et sanctis ecclesiae Eboracensis*. No codices are extant of the first and third work, so that the editions of Surius, Mabillon, Duchesne, and Froben had to be carefully consulted in connection with Baeda, whose ecclesiastical history is the foundation of the principal parts of the York poem. It may be worth while to mention that the anonymous biographer, writing in the first half of the ninth century, used the compound *Engelsaxo* apparently as a designation for Englishman not uncommon on the continent, p. 25. Alcuin's poem commemorating the school and library of York in his own days has been frequently ascribed to the time when he himself lived on the continent. But not a single verse hints at his absence from York; the work accordingly must have been written before he accepted the invitation of Charles, and therefore between the death of Archbishop Aelberht of York, Nov. 8, 780, and 782 (cf. p. 80). For the life of Saint Willibrord, the apostle of the Frisians and the founder of the see of Utrecht, a work which Alcuin composed both in prose and in verse, some very good manuscripts have been collated, principally with the object of restoring the original text, the uncouth latinity of which, though undoubtedly to be ascribed to Alcuin himself, had been smoothed away considerably by former editors. Thanks to Jaffé and to Wattenbach, we now have an excellent copy, preserving the life of one of the most important Northumbrian missionaries of the eighth century, by his most celebrated literary countryman.

Professor Dümmler, assisted by Wattenbach, has finished the more arduous labour—the editing of the letters. As these have been largely used as epistolary models ever since the latter part of the ninth century, there naturally exists a considerable number of manuscripts, more or less early and complete, in England, France, and Germany, and also in the Vatican, from whence certain additions have been obtained quite recently by the help of another scholar. With the exception of the Roman ones, Jaffé had re-examined nearly every codex himself, and had arranged more than half of the letters for the press, especially those referring to England. Few people are aware how difficult it is to establish a chronological order in epistles, all of which are without any date whatever, many dealing merely in moral arguments and

alluding to no historical fact or person. Moreover the copyists have frequently substituted a barren capital for the name written out in full. However, Jaffé's sagacious scholarship had overcome many of these obstacles, so that the framework of the new order was being prepared, very different indeed from that of former editors, Canisius, Duchesne, Mabillon, and Froben. Yet here and there it has been again changed, since Dümmler, while arranging one third of the letters generally from internal evidence, arrived at different conclusions. He had also to ascertain a large number of quotations marked with a D, and was apparently not altogether satisfied with the rather erratic orthography which Jaffé attributed to Alcuin as original. Indeed it may be affirmed that there is scarcely a single letter which has not been tested by some new light thrown on the subject by Dümmler's elaborate criticism. Important publications like Haddan and Stubbs' *Councils and Ecclesiastical Documents relating to Great Britain and Ireland*, vol. iii., have certainly not been overlooked. Whereas Mr. Stubbs regretted that Jaffé's book was not finished when he selected twenty-one of Alcuin's letters, three of them unpublished, for his most interesting volume, the German editors acknowledge in their turn the assistance of the English scholar. But they have every reason to be proud of now issuing a mass of 306 letters, written by Alcuin or illustrating his life and studies, much more correct in style and more intelligible than all their predecessors were able to render them, thirty-four of which are printed for the first time, and six, which were fragments, restored to integrity in this volume.

It has often been said, that Alcuin does not hold such a conspicuous place in the literary history of England as he deserves, since his talents and learning were transferred to the court of Charles the Great. No doubt, only about thirty letters were written before the year 793, when he left York the second time, never to return. But can there be the least question, that his correspondence is just as valuable in regard to the contemporary history of his native island, political, ecclesiastical, and literary, as in regard to that of the rise and growth of the Carolingian empire, among the intellectual instructors of which he certainly appears to have been one of the foremost?

A few references in both directions may suffice to point out the importance of this great international schoolmaster. Wherever he mentions Archbishop Aelberht (767-780), he does not omit an expression of gratitude for what he owes to his teaching. The greater number of his correspondents are English churchmen, his superiors and his pupils, either at home or abroad. In an early letter (Ep. 14), he calls the continental Saxons *antiqui Saxones*, just as Baeda and the Anglo-Saxon Chronicle do. In his letters to the monks of Wearmouth and Jarrow he is fond of referring them to their own great scholar (Epp. 27. 274). With Baeda he dates the settlement of his forefathers in Britain from about 449: *Ecce trecentis et quinquaginta ferme annis, quod nos nostrique patres hujus pulcherrime patrie incolae fuimus*, Ep. 22 (793). Again he is supported by Baeda's History when he reminds the Church of Canterbury of her priority: *Apud vos clarissima lumina Britanniae requiescunt, per quos lux veritatis per totam Britanniam emicuit*, Ep. 86. It is mainly, too, from Baeda's astronomical and chronological calculations that he teaches king Charles the convergence of the lunar and the solar system and the paschal cycle, as adopted by Latin Christendom. Alcuin himself is the principal mediator between the king of the Franks on the one hand, and Offa of Mercia and Aethelred of Northumbria on the other. Hence both the Acts of the two English Synods of 786 (why does Dümmler suppose that the northern council was possibly held at Corbridge, instead of Finchale, p. 160?)

and Charles's celebrated letter to Offa are published without omission in this collection, Epp. 10. 57, as well as in that of Mr. Stubbs. It was only in consequence of the intestine commotions after Offa's death and Aethelred's assassination that Alcuin, who in the first destruction of Lindisfarne by the Danes thought he saw the finger of God, gave up the desire of ever returning home again, Epp. 79. 80. 86 (797).

On the other side he was mixed up more and more with the relations of church and state on the continent. His familiar correspondence with Charles (David), with Angilbert (Homerus), and Archbishop Arn of Salzburg (Aquila), is full of valuable and sometimes charming details, even though he and his friends may occasionally disagree. As he was recalled from York chiefly for the purpose of assisting in the theological contest against the heresy of Felix of Urgel and Elipand of Toledo, there are of course many documents altogether taken up with Anti-adoptionist dogmatics. Moreover Alcuin's help was required to refute the decrees of the second Council of Nice, in which the Greeks had re-established the worship of images. It is very remarkable to observe, that as the Northumbrian divine had little taste for idolatry, so he most wisely advised his royal friend not to irritate the weak faith of the recently converted Avars and Saxons by a strict exaction of tithes, Epp. 67. 69. 114. Nothing, however, is more important than to follow up the vestiges of information which throw light on the question how far Alcuin was initiated and perhaps even instrumental in the restoration of the Empire by Charles the Great. I wish to notice particularly some words of Ep. 114 (May, 799), after the expulsion of Pope Leo III. by the Romans and the deposition of Constantine V. by his mother Irene have been mentioned: *Ecce in te solo tota salus ecclesiarum Christi inclinata incumbit. Tu vindex scelerum, tu rector errantium, tu consolator maerentium, tu exaltatio bonorum*. In Ep. 159, written early in 801 to the Emperor's sister Gisla, he rejoices in the exaltation of his most excellent Lord David. A little later, Ep. 163 (after April 1, 801), he communicates to Archbishop Arn his great satisfaction about the imperial crown and the pope's restoration. In Ep. 191 (802), addressed to Charles himself, he says: *Dignitas imperialis a Deo ordinata, ad nil aliud exaltata videtur, nisi populo praeesse et prodesse*.

When shortly after he gave up the abbacy of Tours on account of bad health, some change of mind was evidently taking place with regard to his favourite studies. Archbishop Ricbod of Mainz (Macharius) is reproached with his love of Virgil, Ep. 216, and in a letter to Gundrada, a cousin of the Emperor, evangelical truth is opposed to "Virgiliaca mendacia," Ep. 243. By the playful exchange of Teutonic names for those of Hebrew, Greek, and Roman celebrities, some of Alcuin's correspondents still remain hidden even to the searching perspicacity of scholars like Jaffé and his learned friends. Ep. 282 is directed to Anthropolos, Monna in the superscription, a priest unquestionably from the north of England, and to Stratocles, to whom one may perhaps venture to restore his native name of Aethelhere.

R. PAULI.

Intelligence.

On the 12th of August died at Stuttgart, aged 69 years, Dr. Christoph Friedrich von Stälin, director of the Royal Library and one of the most learned and meritorious historians of Germany. He never occupied a professorial chair, but for a number of years had been a member of the Society for early German History, originally superintending the editorship of the *Monumenta Germaniae Historica*, and a very useful companion of the Munich Historical Commission. His *Württembergische Geschichte*—which was begun in 1841, but of which the first instalment of vol. iv, containing the turbulent reign of Duke Ulrich, the period of the peasants' rebellion and the reformation of the church, was published in the year 1870—is universally acknowledged to be a perfect model of

a provincial history (*Landesgeschichte*) in regard both of completeness and of methodical precision. The second portion of vol. iv. has been left ready for press and will be published in a very short time.

Messrs. Longmans announce a series of Histories in small and cheap volumes, under the general editorship of the Rev. E. E. Morris, M.A., which is likely to advance a sounder method of historical teaching in our schools. Its special object is to promote "a horizontal rather than a vertical study of history," i.e. each volume will be a history of all the States of Europe at a particular period. Among the volumes which are to appear in this series, as at present arranged, we may mention those by Dean Church on the Beginning of the Middle Ages; by Prof. Stubbs on the Early Plantagenets and their relation to the history of Europe; by Mr. J. Gairdner on the Houses of Lancaster and York; by Mr. F. Seebohm on the Era of the Protestant Revolution; by the Rev. M. Creighton on the Age of Elizabeth; by Mr. S. R. Gardiner on the Thirty Years' War; by Mr. J. L. Sanford on the Stuarts and the Puritan Revolution; and by Mr. J. M. Ludlow on the War of American Independence.

The Camden Society have in the press *The Military Memoirs of Colonel Birch*, edited by the late Rev. J. Webb and the Rev. T. W. Webb, illustrating the period of the Civil War. It will be followed by *Letters addressed to Sir Joseph Williamson*, edited by W. D. Christie, C.B., furnishing detailed information on the proceedings at Court during the time of the so-called Cabal ministry.

Académie Royale des Sciences, des Lettres, et des Beaux-Arts de Belgique.—The Class of Literature and the Moral and Political Sciences has issued its list of subjects for the prize competitions of 1874 and 1875. I. Prizes will be given in 1874 for the best essay on each of the following subjects:—

- (1.) *On the life and reign of Septimius Severus.*
- (2.) *A detailed account of the philosophy of St. Anselm of Canterbury; its sources, its value, and influence on the history of ideas.*
- (3.) *The economical theory of the relations of labour and capital.*
[The essay to be simple in style, and within the comprehension of all classes of society.]
- (4.) *A history of Flemish ("thiopia") philology to the end of the 16th century.*
- (5.) *An account of the negotiations which ended in the Treaty of Westphalia (1648); and the character and results of that Treaty in relation to the Low Countries.*

[Candidates to consult unpublished documents.]

The prizes for the best essays on the first and second subjects will be a gold medal of the value of 600 francs; the prize for each of the other subjects will be of the value of 1,000 francs. Essays must be legibly written in French, Flemish, or Latin, and quotations verified by accurate references to editions, pages, &c., of the works cited. Authors must send in their essays before February 1st, 1874, addressed, post paid, to M. Ad. Quetelet, secrétaire perpétuel; they must not sign their names, but must affix a motto, and enclose their real name and address in a sealed envelope marked with the same motto on the outside.

II. The subjects of the competition for 1875 are as follows:—

- (1.) *What would be the advantages and disadvantages of the free exercise of the liberal professions in Belgium?*
- (2.) *Explain the historical phenomenon of the preservation of our national character through all periods of foreign rule.*
- (3.) *The French encyclopaedists endeavoured in the second half of the eighteenth century to make the Principality of Liège the chief centre of their propaganda. Trace the means which they employed, and the results of their attempts, as seen in their influence on the periodical press, and on the literary movement generally.*
- (4.) *Write a history of Jacqueline de Bavière, Countess of Hainault, Holland, and Zealand, and Lady of Friesland.*

[Candidates should pay special attention to the principal events in the life and reign of this princess, and should use, without following them too implicitly, the principal works, foreign as well as Belgian, bearing on this period.]

- (5.) *Give the history of the public finances of Belgium since 1830, characterising, in their principles and results, the different legislative enactments, and the principal administrative measures relating to them.* [The essay to include a summary view of the finances of the provinces and communes.]

The prize in each case will be a gold medal of the value of 600 francs.

III. The "Prix de Stassart" (value 600 francs) will be awarded to the author of the best essay on *Christophe Plantin, his relations and labours, and the influence of the press founded by him.* As this prize will be awarded chiefly on the ground of literary merit, candidates need not quote their authorities, unless in cases of vital importance.

IV. The biennial prize of 3,000 francs will be given for the best essay on the following subject:—*A view of the constitutional principles common to our various provinces, and those peculiar to each of them, at the time of the French invasion in 1794.*

The conditions above stated apply also to all these competitions, and essays must be sent to the secretary, as above, before February 1st, 1875.

Contents of the Journals.

Literarisches Centralblatt, 14th June, reviews Gardthausen's *Die geographischen Quellen Ammian's*, and Kraus' *Roma Sotteranea* [a translation of Northcote and Brownlow's book].—21st June, praises Keller *De Juba Appiani Cassique Dionis auctore*, and Franck's valuable treatise, *Die Landgrafschaften des heiligen römischen Reichs*.—Weber criticises Jacobi *De astrologiae indicæ horæ appellatæ originibus*, and Speijer *De ceremonia apud Indos, quæ vocatur jatakarma*.—Peiper's *Ekkhardi primi Waltharius* is reviewed, our first complete critical edition; the prologue and the poem are not by the same author, but Peiper's solution of the whole question is perhaps too artificial.—28th June notices Herrmann's *Zeitgenössische Berichte zur Geschichte Russlands* [contemporary Prussian and Austrian accounts of Peter the Great].—An account follows of Schmidt's inquiry into the sources of Hyginus' *Fabulae*, and of Victor Hehn's interesting tract *Das Salz. Eine kulturhistor. Studie*.—5th July reviews Ranke's edition of the Correspondence between Frederic William IV. and Bunsen [to which Ranke's own position and views lend additional interest].—Meissner's *Untersuchungen über Shakespeares "Sturm"* receives praise. He thinks Ayre's *Die schöne Sidea* was used directly by Shakespeare, and illustrates largely from Strachey's account of a shipwreck on the Bermudas.—Zingerle's *Das deutsche Kinderspiel im Mittelalter* will interest those who inquire into the antiquity of children's games in England.—12th July reviews favourably Liittke's *Ägypten's neue Zeit*, though preferring in some points Lady Duff Gordon's account of home life in Egypt.—Vambéry's *Uigurische Sprachmonumenta* is also praised; his history of Transoxiana was recently criticised unfavourably.—Bucheler analyses Heydemann's *Die Vasensammlungen des Museo Nazionale zu Neapel*, and suggests some corrections in the inscriptions.—19th July says Motte's *Étude sur Marcus Agrippa* much overrates Agrippa's achievements and unfairly depreciates Augustus.—Sanders' *Wörterbuch deutscher Synonymen* is most severely criticised. Sanders attacked Jacob Grimm's great Dictionary, when the first numbers appeared, in an absurd manner.

Bullettino dell' Istituto di Corrispondenza Archeologica, June and July, contains descriptions of the Etruscan tombs at Corneto. The main object in our present inquiries is to distinguish the true national art from its Grecised form. Similar descriptions of the excavations at Nassano and Capua enable us to compare the Campanian mode of representing nature and mythical subjects. The number of Etruscan inscriptions is fast increasing; one of the new ones confirms the view that the vernacular name for Mars was Laran. The mosaics at Baccano (on the Via Cassia, sixteen miles from the Porta del Popolo) are shown to have value for the history of Art. A fragment of pottery found in the Emporium proves the existence of trade with Thubuscum (*Tac. Ann.* iv. 24), perhaps in salt fish. Last come three late Greek inscriptions from Mantinea, Argos, and Sparta.

Zeitschrift für Numismatik. Herausgegeben von Dr. Alfred von Sallet. Erster Band. Erstes Heft. Berlin: Weidmann. 1873.—This new numismatic journal is intended to deal with the whole subject down to the sixteenth century inclusive. It begins with an admirably clear essay by E. Curtius on Greek colonial coins. The rule was for the colony to copy the coins of the mother city; thus the western colonies of Corinth have the Pegasus on their silver money. The exceptions to the rule are large, but they may perhaps be rather considered as extensions of the rule itself, e.g. when there is a transfer of allegiance as it were to a new mother city or to a new sovereign. Some cities in late times even adopted Athens as their intellectual parent.—A. v. Sallet describes a series of the coins of Chersonesus in the Crimea, which probably retained its purely Greek character to the last; at least it is doubtful whether any Imperial coins are rightly assigned to it.—A. v. Rauch gives an estimate of the metallic worth of Greek and Roman silver money, ascertained by actually melting a number of coins.—Brandis contributes an interesting account of family devices on Greek coins, the occurrence of which is difficult to prove; sometimes however father and son are found using the same device; it is shown that the devices do not belong to the Eponymous magistrates named in the inscriptions; the induction is based on a large collection of instances.—Dannenberg distinguishes between the various coins of the Hohenstaufen dynasty, minted at Aachen and Köln, about which there has been much confusion.—There are two plates in this number, and the type is exceedingly good. The articles by Curtius and Brandis are of general interest.

New Publications.

ARNOLD, B. *Das altrömische Theatergebäude*. Leipzig: Teubner.
BRUYN, M. D. DE. *Palaestina ex veteris aevi monumentis ac recentiorum observationibus*. Editio tertia. Utrecht: Kemink & Zoon.
CHRONIQUES gréco-romanes inédites ou peu connues, publiées par Ch. Hopf. Berlin: Weidmann.

- CODÆX JURIS bohemicus. Tomi III. pars II. Complectens jus terræ sæculi XV. (1420-1500). Ed. Hermenegildus Jirecek. Prag: Tempsky.
- ENCK, A. De S. Adalardo abbate Corbeiae antiquae et novae. Münster: Theissing.
- HENFREY, H. W. Numismata Cromwelliana; or, The Medallic History of Oliver Cromwell. Illustrated by his Coins, Medals, and Seals. Part I. J. R. Smith.
- JUSTE, Th. Les fondateurs de la monarchie belge. Tome XV. Le Baron Stockmar. Bruxelles: Muquardt.
- KOSKINEN, Y. Finnische Geschichte von den frühesten Zeiten bis auf die Gegenwart. Leipzig: Duncker und Humblot.
- LA MARMORA, A. Un po' più di luce sugli eventi politici e militari dell'anno 1866. Firenze: Barbèra.
- NATIONAL Manuscripts of Scotland. Part III. Longmans.
- PROLEGOMENA ad tabulam geographicam Palaestinae, quam novis curis emendatam edidit M. D. de Bruyn. (Inest disquisitio de situ Taricheae.) Utrecht: Kemink & Zoon.
- ROLLS SERIES. Calendar of State Papers and MSS. relating to English affairs preserved in the Archives and Collections of North Italy. Vol. V. 1534-1554. (Embraces correspondence between the Ambassador Capello and the Signory, and some valuable correspondence of Cardinal Pole.) Edited by Rawdon Brown. Longmans.
- SCHMIDT, M. Das Leben Konons. Leipzig: Körner.
- SMITH, Joseph. Bibliotheca anti-Quakeriana; or, A Catalogue of Books adverse to the Society of Friends. J. Smith.

Philology.

- Éléments de Grammaire Basque, dialecte Souletin, suivis d'un Vocabulaire Basque-Français et Français-Basque. Par Louis Gèze. Bayonne. 1873.
- Guide Élémentaire de la Conversation Française-Basque (Labourdine) précédé d'un abrégé de Grammaire. Bayonne. 1873.

THE first of these works was the subject of merited commendation by many most distinguished Basque scholars at the Congrès Scientifique de France, held at Pau in the spring of the present year. M. L. Gèze, as he informs us in his preface, belongs to the increasing band of scholars who, though not "Escualdun," have mastered the difficulties of "Escuara," and who have generously endeavoured to smooth the way for others who may succeed them. M. J. Vinson, one of the joint editors of the *Revue Linguistique*, author of the *Notions Grammaticales* anonymously prefixed to the reprint of the *Guide Élémentaire de la Conversation Français-Basque* in the Labourdin dialect, is also an example of a foreigner successfully writing on Basque grammar.

Both of these works are written with a view to practical ends rather than to comparative or scientific philology. Each begins with a few remarks on Basque orthography and pronunciation, but with scarcely sufficient attention to the latter; although perhaps enough is said for practical purposes. We think, however, that it would have been well for M. Gèze to notice that in pronouncing the *u* as in French, the Souletin stands alone among the Basque dialects. In the others it is pronounced more as the Spanish or English *u*. Thus the Souletin *ou* represents the *u* of the other dialects. Without a knowledge of this fact a stranger might not immediately see that, e.g. *ur* (Labourdin) and *hour* (Souletin) water, are identical words, the difference of orthography depending solely on the pronunciation. In the *s* we prefer the fuller explanation of M. Gèze to that of M. Vinson. *S*, says the former (p. 2), "A un son spécial qui se rapproche du *ch* français. Dans quelques mots que l'usage enseigne, il a un son doux qui se rapproche du *j*." The latter merely says: "*s*, presque comme *ch* français." But Prince L. L. Bonaparte, in a paper read before the Philological Society, seems to have hit the mark as to the relations of *j* and *s*. "*J* in Soule becomes almost French *j*; and in Roncal and other places it is *sh*. *The s has a peculiar palatalized sound throughout*" (*Athenæum*, June 14, 1873). Both MM. Gèze and Vinson omit to notice the peculiar modification of *s* after *t* in the middle of a word. We have never

succeeded in representing this to our satisfaction by any collocation of letters; and that the difficulty is not imaginary the various methods employed in writing a word like Itzatzu prove. The official orthography seems now to be Itxassou. Other combinations are Itxatsou, Itsatsou or *u*. We have got French, Gascons, English and Germans to pronounce this word after the natives, but never (as it seemed to our ears) with complete success. This may seem to be trifling, but the real interest of Basque does not lie in its being a spoken language or in its modern literature, but in its place in comparative philology, and in the light thence thrown on ethnology and anthropology. It seems to us that in attempting to decipher the characters of the so-called Iberian (presumed Basque) inscriptions and coins, it is of the highest consequence to determine what sounds in modern Escuara are most peculiar to it; for these would be most probably those which are expressed in the less known characters of those inscriptions.

In endeavouring to write for practical purposes only we think that M. Gèze has somewhat confused his subject by attempting to form a Basque grammar on too close an analogy with French and Latin grammar; e.g. he writes (p. 6): "L'article n'existe pas en basque," and, after explanation of its functions in French, "en basque ces deux buts sont remplis par des différences dans la terminaisons des mots." He gives (p. 18) a table of terminations of the substantive, and makes (p. 7) fourteen cases: three nominative, four dative, two each for gen., accus., and abl., and one vocative. The two simple nominative are *a* singular and *ac* plural. We think the explanation of M. Vinson (p. ix) quite as simple, and far more scientific. "Il n'y a pas là, à proprement parler, de déclinaisons analogues à celles du latin et du grec. Toutes ces terminaisons accumulées en basque les unes sur les autres, ne sont point des cas, mais bien de véritables particules qui jouent le rôle de nos articles et de nos prépositions, qui, au lieu de se mettre devant le mot, se placent derrière lui et qu'on a pris l'habitude, dans l'écriture, de réunir à ce mot. . . Le basque a un article défini qui est *a* au singulier et *ak* au pluriel."

Thus when M. Gèze comes afterwards to treat of prepositions (pp. 28, 29) he is involved in ambiguities. "Les prépositions qui se joignent au substantif ont beaucoup de rapport avec les terminaisons de la déclinaison. La distinction est presque nulle, et il n'est pas deux grammairiens d'accord sur le point de séparation." Would not some of this confusion be avoided by the remark that many parts of speech which are pre-positions in French and Aryan tongues become post-positions in Basque, and when joined to the substantive serve to mark the inflexion? Extending this remark it becomes at once apparent that the Basque is an agglutinative language; although it may be difficult to determine with what member of that extensive family it may have the closest affinity. Analogies, more or less close, have been detected by Prince L. L. Bonaparte with the Finnish; by M. d'Abbadie with the Hamitic; by Charency and others with the Algonquin and some other Canadian dialects; by Vinson with the Dravidian; and by Sayce with the Accadian. All these are agglutinative languages, and consequently all comparisons of Basque with Hebrew or other Semitic tongues, and with Keltic, whether as parent, sister, or daughter, or with any other Aryan tongue, would seem beside the mark. In common with other agglutinative tongues, the Basque possesses great powers of assimilation and facility for producing new forms. These powers it has most freely used on the languages of all races with which it has come in contact: hence the very mixed nature of the vocabulary, and the danger of hazarding theories as to the character of the language from it.

We are sorry to see that M. Gèze has made so much use of ecclesiastical Basque in the vocabulary appended to his Grammar. It is this which, to our mind, partially vitiates the labours of so many Basque scholars, especially of foreigners, e.g. the late Philips of Vienna. The real interest of the language lies in the portion, if it can be discovered, anterior to Christianity and unaffected by it. It is true that the older books and MSS. are difficult to obtain, and have the reputation of being almost unintelligible. Yet for the Souletin dialect there are the poems of Oyhenart, and the proverbs collected by him. Songs and ballads, at least modern ones, are not wanting in that dialect. Another and much more plentiful, but as yet almost unused source, is the pastorales or dramas, which are written almost exclusively in the Souletin dialect, and of which numerous MSS. are in possession of the village "éditeurs." We do not suppose that any of these are of any antiquity (the subjects seem to be taken either from the Chansons de Geste, or from the lives of the Saints), but dramatic literature often prefers and preserves more archaic forms than those used in other branches of literature.

As to the unintelligibility of the older Basque, this we are persuaded has been greatly overstated. The difference is often mainly orthographical. The forthcoming edition of the poems of Bernard Dechepare, now in the press at Bayonne, under the superintendence of M. J. Vinson, will, we think, establish this. M. d'Abbadie assures us that the Basque of the oldest MSS., though differing widely from the literary language, is almost identical with the "Basque de cuisine" of the present day. Many of the words which Larramendi was supposed to have invented in his *Diccionario trilingue* have been discovered by Prince Bonaparte to exist in various dialects. One branch of allied investigation, and one which can only be successfully followed by native Basques, should be attended to without delay—this is the collection of whatever may remain of genuine Basque folklore. One specimen of this which has been signalized to us as still existing, though unrecorded, is the legend of the Cyclops (Tartarua).

Among peculiarities of the Basque we may observe that its numerical system was perhaps originally quinal and not decimal; that the week apparently consisted of three days only, the first, middle, last day—Astelehen, astearte, asteazken; and, as stated on the authority of M. le Chanoine Inchauspé, that the names of all cutting instruments seem to have been derived from radicals signifying rock or stone. These and other peculiarities may at some future period give some aid towards an approximative conclusion as to the comparative antiquity of the Basque race and language.

WENTWORTH WEBSTER.

Forbiger's *Virgil*. 4th Edition. Vols. i. and ii. (*Eclogues, Georgics, Aeneid* i.-vi.) Leipzig: Hinrichs.

It is unnecessary to dwell at length on the general characteristics of a work so well known to English scholars as Forbiger's edition of *Virgil*: on the candour and generosity with which, often at the expense of the form of his notes, the editor is careful to embody the views of all the better commentators on his author: on the fulness of his illustrations, the multitude of his references, and the general moderation and good sense of his criticism and views of interpretation. More than twenty years have elapsed since the appearance of Forbiger's third edition: and he has taken the trouble, *mare suo*, to make the notes now before us a chronicle of all that criticism has done for Virgil in the long interval. English scholars will be especially glad to find that the labours of Conington have received the fullest and most liberal recognition. It is almost needless to state that

Forbiger has to a great extent reformed the orthography with which he was contented in 1852, though he does not follow Ribbeck in culling from the MSS. such choicer rarities as *quodannis*, *sephyris*, *forsitam*, *possimus* (for *possumus*), *bocula*, *fraglantia*. The spelling of the notes has however not been thoroughly recast; such *priscæ vestigia fraudis*, for instance, as *coelum* and *conditio* still occasionally lurking unamended.

In preparing his fourth edition Forbiger has, of course, not been uninfluenced by Ribbeck's text: but, though riot so conservative as Conington, he has declined in a great number of cases to abandon his former judgment. He reads, for instance, in E. 1, 66, "rapidum Cretae Oaxen," not with Ribbeck "rapidum cretae": in E. 2 he declines to omit vv. 32-34: in E. 3, 110 he still reads, "haud metuet," not (as Ribbeck) "haud temnet": in G. 4, 62 he retains "jussos saporos" as against Ribbeck's "tussos": ib. 400 he reads "frangentur," not "franguntur": 415 "diffundit," not "defundit": in *Aen.* 1, 396 he altogether declines, we are glad to say, Ribbeck's "capso"; in 2, 616 he still retains "nimbo," of which more below. Only once in the *Edogues* does Forbiger follow Ribbeck in adopting the numerical division of the lines which, under the name of *σχήμα κατ' ἀριθμὸν*, is familiar to the readers of Ellis's *Catullus*. The one exception is the eighth Eclogue, where Forbiger has followed not Ribbeck's arrangement (which appears to us the best), but Gebauer's. In the *Georgics* it appears that Forbiger mostly approves of Ribbeck's transpositions, though as a rule (exceptions are G. 3, 120-122, 4, 248 foll.) he avoids altering his text to suit them. As he nowhere mentions, we conclude that he had not when writing his notes yet come across, Conington's criticisms of Ribbeck's Prolegomena published at the end of the third volume of his *Virgil*. Conington's mastery of the literary point of view, so important in dealing with a poet like Virgil, enabled him to show that in most cases where Ribbeck proposes a transposition the traditional order is better suited to the spirit and genius of Virgil's composition. We would refer in particular to Conington's discussions of G. 2, 371 foll. and 4, 228 foll. (vol. iii. p. 472-3), as striking instances of the truth of this remark.

The main body and the general character of the commentary remain the same as in the third edition, though the editor has swelled its bulk very considerably (in the second volume by some 130 pages) by the mass of fresh discussion and illustration introduced. A mere commendation of its laborious fulness would be of little service: it may be more useful to point out a few passages in which further illustration of Virgil's language seems still possible.

In E. 4, 15 Virgil says, speaking of the righteous king of his prophecy, "Ille deum vitam accipiet, divisque videbit Permixtos heroas, et ipse videbitur illis": words which are generally referred to the return of the golden age, when men, according to Hesiod, "lived like gods," and to the familiar intercourse between gods and men supposed by the Roman poets (not by Hesiod) to be a characteristic of the golden age. Virgil's words will no doubt bear this simple meaning: but the phrase "deum vitam accipere" is hardly an obvious equivalent for "deorum vitam agere": nor, when we consider that Virgil elsewhere uses the simple expression, "fructur deorum colloquio," does it seem natural that he should have meant no more than this by the remarkable words, "divosque videbit," &c. It seems to us possible that the language of the whole passage is adumbrated from the mysteries: "accipiet" being suggested by the phrase "sacra accipere," "to be initiated into mysteries," "deum vita" by the popular notion (see Plato *Phaedo*, pp. 69, 81) that an initiation into the Eleusinia was an introduction to

a life with the gods, and "divosque videbit," &c., to the exhibition of statues of gods and heroes which was one of the chief attractions of the Eleusinia. Thus "deum vitam accipiet" will mean "shall be initiated into the life of the gods." This criticism may appear far-fetched, but it should be remembered that Virgil chose his words with extraordinary care, often repeating himself with little or no variation when the language appeared to him to be a perfect expression of his thought, and hardly ever, in important matters, using language which had not to his mind, if not some cherished association, at least some more or less exquisite justification.

The difficult passage *G.* 4, 290 foll., where Virgil seems to have confused his geography beyond ordinary poetical licence or conventionality in making the Nile flow from India ("usque coloratis amnis devexus ab Indis") may perhaps be illustrated by an indication of the popular conceptions of geography afforded by Arrian (6, 1), according to whom Alexander, on first seeing crocodiles on the Indus, concluded that he had discovered the upper course of the Nile. Such an idea could not have been possible, had not considerable confusion existed at the time in the popular imagination as to the limits and extent of Africa and Asia: and whether the popular imagination on those matters was more enlightened in the time of Augustus than in that of Alexander may be doubtful. To take "Indis" of the Aethiopians, as Forbiger still does, would not be necessary if our hypothesis be correct.

In the discussion on the first lines of the *Aeneid* Forbiger might have added that the words "Arma virumque cano" are found scribbled on the walls of Pompeii, furnishing further proof that they were the first words of the poem. It may be also observed here (as we do not think any commentator has remarked it) that although several expressions in the opening of the *Aeneid* recall the opening of the *Odyssey*, the rhythm and general structure of the first seven lines of the *Aeneid* (beginning with "Arma virumque") are taken from that of the first seven lines of the *Iliad*: and that the first two and the last lines of the seven in each case are, in point of metre, precisely similar.

In 1, 22 ("sic volvere Parcas"), and the similar passage 3, 375, it seems possible that the word "volvere" was suggested by *κυλίνδω* in *Od.* 8, 81, τότε γάρ ῥα κυλίνδετο πῆματος ἀρχή Τρωσὶ τε καὶ Δαναοῖσι Διὸς μεγάλου διὰ βουλᾶς.

Several passages have been hitherto passed over in which the narrative of the first *Aeneid* recalls passages in the early part of the *Odyssey*: thus Virgil's "Sis felix quaecumque" is Homer's *κλῦθι, ἀναξ, στίς ἐσσί* (*Aen.* 1, 330, *Od.* 5, 445) where also Homer's πολλὰ μογῆσας seems to have suggested Virgil's "nostrum laborem." Venus' "haud equidem tali me dignor honore" (1, 335) is like Ulysses' οὐ γὰρ ἐγώ γε Ἀθανάτοισιν εἶκα (*Od.* 7, 208). "Quisquis es, haud credo, invisus caelestibus auras Vitalis carpis, Tyriam qui advenersis urbem" (1, 387) does not so much suggest *Od.* 3, 27 as 6, 240, where Nausicaa says οὐ πάντων ἀέκητι θεῶν, οἳ Ὀλυμπον ἔχουσι, Φαιήκεσσ' δδ' ἀνὴρ ἐπιμίσγεται ἀντιθέοισιν. The grove in the midst of Carthage (*Aen.* 1, 441) is suggested by the ἀγλαὸν ἄλσος Ἀθήνης near the city of the Phaeacians, *Od.* 6, 291.

In *Aen.* 1, 374 after "si vacet audire" Forbiger reads "diem Vesper componet," Conington "conponat." Forbiger may be right, though we suspect that strict grammar is on Conington's side. But Forbiger overstates his case when he speaks of "almost all MSS." giving "conponet": for the authority of the two important uncials, Pal. and Rom., the first of which reads originally and the second without any alteration "conponat," is surely sufficient to counterbalance a host of inferior testimony. Nor do we understand how Forbiger can appeal to Orelli's

Cicero as giving in the similar passage, *Tusc.* 5, 35, 102, "dies deficit, si velim paupertatis causam defendere." In the edition of Orelli now before us (1861) Baier distinctly reads *deficiat*. And the passage from Saleius Bassus quoted by Forbiger at the end of his note in support of *conponet* ("Sed prius emenso Titan versetur Olympo, Quam mea tot laudes decurrere carmina possint") surely makes very strongly for *conponat*.

1, 599. May not "exhaustos casibus" be a Virgilian inversion for "exhaustis casibus"?

2, 615-6. "Iam summas arces Tritonia, respice, Pallas Insedit, nimbo effulgens et Gorgone saeva." We are glad to see that Forbiger retains "nimbo" here, in spite of the preference of most modern scholars for "limbo," the variant mentioned by Servius. Whence, indeed, could "nimbo" have come, except from the hand of Virgil? Forbiger has, however, hardly done justice to Conington's opinion that Virgil in this passage meant to translate *Il.* 15, 308, where Apollo is described as εἰμένος ὤμου νεφέλην, ἔχε δ' αἰγίδα θούριν: a comparison which, if correct (and it is at least very plausible), shows that "saeva" is the abl., not the nom. We may add that there are two passages which, so far as we know, have been hitherto overlooked by the advocates both of "nimbus" and "limbus." The first is *Il.* 18, 203 foll., where Athene arms Achilles with the aegis and crowns his head with a cloud from which issues a blaze of flame: the second, from a very different poet (Prudentius, *contra Symmachum* 2, 576), makes for "limbum": "Nec Paphiam niveae vexere columbae, Cujus inauratum tremet gens Persica limbum."

3, 525. "Magnum cratera corona induit": is it possible that in this and similar passages Virgil was mistranslating Homer's ἀνθεμέντι λέβητι, *Od.* 3, 440?

6, 126. "Facilis descensus Averno": the nearest Greek parallel to (perhaps the origin of) this passage seems to be Aeschylus quoted by Plato (*Phaedo*, p. 108 a) ἐστὶ δ' ἀρα ἡ πορεία οὕχ ὡς ὁ Αἰσχύλου Τηλέφος λέγει· ἐκείνους μὲν γὰρ ἀπλὴν οὐκὸν φησὶν εἰς Αἴδου φέρειν.

6, 273 foll. "Vestibulum ante ipsum primisque in faucibus Orci," &c. Germanus showed that Virgil was here thinking of *Lucr.* 3, 65 foll.: but Virgil's debt to the third book of Lucretius does not end here. Notice Virgil's "terribiles visu formae," "luctus," "ultrices curae," "morbi," "metus," "sopor," and then read side by side with his description *Lucr.* (3, 459 foll.) describing the diseases of the mind:—

"His accedit uti videamus, corpus ut ipsum
suscipere inmanis morbos durumque dolorem,
sic animum curas acris luctumque metumque,

* * * * *
interdumque gravi lethargo fertur in altum
aeternumque soporem oculis nutuque cadenti."

Virgil, *more suo*, personifies where Lucretius employs abstract expressions. Now if we are right in comparing these passages, it seems to follow, as was suggested some years ago by a reviewer of Conington's second volume, that Virgil's "consanguineus Leti Sopor" is not "sleep" but "lethargy": that Seneca so understood Virgil seems very probable from the description of Hades in the *Hercules Furens* (a passage modelled in every line upon Virgil), where we read (v. 690), "Taxo imminente, quam tenent *segnis Sopor*, Famesque maesta tabido rictu jacens," &c. Forbiger is of course right in quoting Hesiod, *Theogony* 758: but he might with advantage have brought out more clearly that Hesiod's ὕπνος καὶ θάνατος, δεινοὶ θεοί, have their abode in the underworld.

6, 427. "Infantumque animae flentes in limine primo" is explained by Conington as a reference to the Roman habit

of burying new-born infants "in suggrundis," under the eaves of the house: Forbiger does not allude to this interpretation, nor does he fully discuss the difficulty of the line. It may perhaps be worth noticing that the ghost in Plautus' *Mostellaria* (2, 2, 67) is made to say, "Nam me Acheruntum recipere Orcus noluī, Quia praemature vita careo." The infants in *Virgil* are indeed allowed to cross the Styx: but they do not get further than the threshold of Orcus. Both the passage in *Plautus* and that in *Virgil* seem to be based on a notion that a full term of life ended by a natural or honourable or happy death was a necessary condition for a complete admission into the under-world. We have not been able to pursue the traces of this notion any further: but its existence seems to be confirmed by the fact that in *Virgil*'s Hades the unjustly-condemned, suicides, and victims of unrequited love have their place next to the infants.

6, 545. "Explebo numerum, reddarque tenebris." Mr. Long's idea that "numerus" means "my place" is confirmed by Seneca *ad Marciam* 12, 3, "degenerem aliquem et numerum tantum nomenque filii expleturum": Forbiger seems inclined to take it as = "the number of the shades."

A passage in the 47th poem of Antipater of Sidon will illustrate "Sed Nox atra caput tristi circumvolat umbra": he says there of Erinna οὐδὲ μελαίνης Νυκτὸς ὑπὸ σκιερῇ καλύπεται πτέρυγι. It is curious that *Lucretius* should have translated the last two lines of the same poem.

Before bringing this notice to a close we should add that the book is disfigured by a considerable number of misprints, e.g. *rarum* for *ramum* in 5, 854. It is inevitable that in such a mass of references as Forbiger makes a point of giving there should be some inaccuracies: we have noticed the following:—On 1, 264 Forbiger quotes 6, 852 and 8, 316 as instances of "mores" used for "leges": in both places *Virgil* has the singular of *mos*: the further reference to 8, 42 and 11, 708 we cannot understand. On 1, 269 "annuos orbes" is quoted from 5, 46 instead of "annuus orbis." On 1, 499 Forbiger remarks, "Alibi Vergilius syllabam (primam voc. *Dianae*) ubique corripit, etiam Nominativo xi. 582." In that passage ("sola contenta Diana") "Diana" is the abl. On 2, 585 "Calydona merentem" is quoted from 7, 307 as if "merentem" were equivalent to "sontem" and had no accusative after it: the fact being that in that passage "merentem" governs "scelus." On 2, 273 a reference is made to the *eighth* book of *Tacitus*' *Histories*. On 6, 79 the line of *Varius* "Insultare docet campis fingitque morando" is quoted from *Macrobius* without any hint as to its real author, so that an uninformed reader would suppose it had been written by *Macrobius* himself. On 6, 254 we cannot comprehend what Forbiger means by saying that we find *semper* (with a long final syllable) in *Lucretius* 3, 2. The word *semper* does not occur in that line, and we had always supposed that *Lucretius* rarely, if ever, allowed himself such a licence.

We look forward with great interest to the appearance of the third volume, which will complete the commentary on the *Aeneid*. H. NETTLESHIP.

Intelligence.

The English Dialect Society now numbers about 150 members, at a subscription of half-a-guinea per annum; the hon. sec. being the Rev. W. W. Skeat, 1, Cintra-terrace, Cambridge, and the treasurer the Rev. J. W. Cartmell, of Christ's College, Cambridge. Now that several communications have been sent in or are preparing for publication, new members are much wanted to pay for the printing of the matter collected. The first publications of the Society, issued to subscribers for the year 1873, will be ready by the end of the year. Glossaries of words in use in Swaledale, in Nidderdale, near Leeds, and in Hampshire, are in course of preparation. A glossary of Yorkshire words, printed in 1781, will be reprinted shortly.

Contents of the Journals.

Rheinisches Museum, vol. xxviii., pt. 3.—W. Ihne: The Development of the Comitia Tributa. [Proposes a new view as to the import of the Valerian, Publilian, and Hortensian Laws.]—W. Vischer: Did they stand or sit in Greek popular assemblies? [Decides that they sat.]—H. Usener: *Vergessenes*. [A number of interesting miscellanea, on Cicero's Hortensius, the early history of Greek comedy, &c.]—G. Kaibel: Quaestiones Simonideae.—O. Ribbeck: Critical contributions to Dracontius.—M. Isler: On the Lex Poetilia de ambitu.—W. Ihne: On Hannibal's absence from Carthage. [Seeks to show that Hannibal lived five years at Carthage after his father's death.]—W. Gilbert: The date of the Supplices of Aeschylus. [Supplices said to be one of the very earliest of A.'s dramas.]—A. Duncker: Roman pottery-marks from Ruckingen.—W. Schmitz: On the Tironian Notes.—J. Krauss: Epistolum Homericum.—C. Badham: Coniectanea. [Some noteworthy suggestions on the text of Plato.]—W. Teuffel: On Horace. [A. P. 220-250]—On the Rhetorica ad Herennium.—G. Kiessling: On Cicero and Seneca Rhetor.—C. Halm: On the Dialogus de Oratoribus.—O. Ribbeck: On the same.—L. Müller: On Nonius.—The same: August Meineke. [Severely criticizes Ranke's Life of Meineke.]—Erotemata philologica.

Hermes, vol. vii., pt. 4.—M. Haupt: Coniectanea.—M. Haupt: Fragment of a panegyric on King Theodahad. [The fragment published some years ago by M. d'Arbois de Jubainville, whose view as to the "clementissimus rex" mentioned is accepted by H.]—H. Weil: The Oetaea in the Fourth Century. [An attempt to fix the limits of the territory of the Oetaeans: a map accompanies the essay.]—E. Hiller: The Athenian Odeons. [On the οἰκίον of Pericles as the place for the πρόδῳν or rehearsal of plays.]—C. Curtius: An Inscription from Lesbos. [An interesting document in Lesbian Aeolic, presumably of the time of the Emperor Commodus.]—H. Bonitz: On Aristotle's *De Anima*. [Explanations of sundry places in Bk. I.]—N. Wecklein: The torch-race. [With remarks on the religious character of the institution.]—V. Gardthausen: Interpolations in Ammianus.—R. Hercher: Notes on Greek prose authors. [Mostly emendations on the *Ōvos* of the pseudo-Lucian.]—Th. Mommsen: The Verona list of consuls from A.D. 439 to 494.—H. Jordan: Masons' marks. [Suggests that certain symbols on Roman masonry, which have been taken for letters, were mere marks for the guidance of the workmen.]—G. Hirschfeld: Boundary-stones of Trittyes. [On a little inscription recently found at Peiraeus.]—R. Hercher: On the fragments of the Romance of Constantinus Manasses. [Various readings after a fresh inspection of the MS.]—Index to vol. vii.

New Publications.

AMMAU, John Conrad, M.D. A Dissertation on Speech. (Originally printed in Latin by John Walters, Amsterdam, 1700.) Sampson Low.

BEGEMANN, W. Das schwache Praeteritum der germanischen Sprachen. Berlin: Weidmann.

DOBREE. Adversaria critica, cum praefatione Gulielmi Wagneri. Vol. I. Pars I. (Calvarys philol. und archäolog. Bibliothek.) Band 16 (II. Serie I.) Berlin: Calvary.

FRAGMENTUM medicum graecum a C. Bursian editum. Jena: Neuenhahn.

KOHLMANN, R. De verbi graeci temporibus. Halle: Lippert.

POTT, Prof. Dr. A. F. Etymologische Forschungen auf dem Gebiete der indogermanischen Sprachen. Band 5. Detmold: Meyer.

REDSLOB, Th. M. Die arabischen Wörter m. entgegengesetzten Bedeutungen. Göttingen: Vandenhoeck und Ruprecht.

SCHINCK, E. De interjectionum epiphonematumque vi atque usu apud Aristophanem. Halle: Lippert.

VOLKMAN, R. Observationes miscellaneae. 2 Partes. Berlin: Calvary.

ZACHER, K. De prioris nominum compositionum Graecorum partis formatione. Halle: Lippert.

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3. NATÜRLICHE SCHÖPFUNGSGESCHICHTE. Gemeinverständliche wissenschaftliche Vorträge über die Entwicklungslehre. Von Dr. ERNST HAECKEL, Professor an der Universität Jena. Vierte verbesserte und vermehrte Auflage. 8vo. 10s.

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University College, London.—Department of the Fine Arts.

The Slade Professor, E. G. POYNTER, Esq., A.R.A., will deliver an INTRODUCTORY LECTURE, open to the public, at 4.30 P.M. on Thursday, October 2.

The CLASSES for DRAWING, PAINTING, and SCULPTURE will begin on the following morning at 9.30.

The late Mr. FELIX SLADE has by his will founded SIX SCHOLARSHIPS of £50 per annum each, tenable for three years by Students of the College for proficiency in DRAWING, PAINTING, and SCULPTURE. Two of these Scholarships may be awarded in 1874, the competition for which will be limited to those who enter the Fine Art Classes before November 16 next, and whose age on June 6, 1874, will not be more than nineteen years. Ladies, as well as gentlemen, are eligible to obtain Slade Scholarships.

Prospectuses, containing full information respecting Fees, Times of Class Meetings, the Regulations relating to the Slade Scholarships and Prizes, with other particulars, may be obtained on application at the College, Gower-street, W.C.

JOHN ROBSON, B.A.,
 Secretary to the Council.

August, 1873.

The Owens College, Manchester. (The Session 1873-4 will be opened in the New Buildings in Oxford-road.)

PRINCIPAL J. G. GREENWOOD, B.A.

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Greek	Professor J. G. GREENWOOD, B.A., (Fellow of Univ. Coll., London.)
Latin	Professor A. S. WILKINS, M.A., (Fellow of Univ. Coll., London.)
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The NEXT SESSION COMMENCES on the 7th October.	Lecturer, Mr. HERMANN BREY- MANN, Ph.D.
Candidates for Admission must not be under fourteen years of age, and those under sixteen will be required to pass a preliminary examination in English, Arithmetic, and the elements of Latin.	Lecturer, Mr. WILLIAM WALKER.
Prospectuses of the several departments of the Day Classes, the Evening Classes, and the Medical School, and of the Scholarships and Entrance Exhibitions tenable at the College, will be sent on application.	Mr. FREDK. BRIDGE, Mus.B.
J. HOLME NICHOLSON, Registrar.	

THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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No. 81.]

REGISTERED FOR

WEDNESDAY, OCTOBER 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Alcestis. A Novel. 2 vols. Smith, Elder, and Co.

A MUSICAL English novel is rare, a clever English musical novel rarer yet; *Alcestis* as both musical and clever deserves hearty welcome. Despite more than a reminiscence of *Consuelo* in general tone, choice of time and place, and conception of the character of the heroine, this story is fresh and original, and indicates a hand vigorous if somewhat untried. German life and German music being the subject matter, it is natural that the manner of German musical romances should have unconsciously been assumed by the author of *Alcestis*: but the German colour reaches even deeper than this; the style reads like a spirited translation, the sentimental *timbre*, the picturesque mode of presenting scenes in the drama are thoroughly German. However, if this foreign element be a fault, it is also a charm, and imparts a certain piquant flavour to the book.

The artistic career, speaking now of music and the drama, affords much more material for a powerful novelist than is commonly used by English writers; possibly because the "artist" is a product not wholly understood in England, scarcely one of those natural growths of the soil whose origin and development are well known and classified. The artist as evolved out of the brain of most novel writers among us (with a few honourable exceptions), is either a delicate being fed on rose leaves, exercising any amount of power as actor, singer, virtuoso, by some false prerogative without need of work, ever ready to expand seraphic wings and fly out of sight of the adoring crowd: or else a rather coarse, passionate individual, a "woman-killer" or a Circe, given to running away with other people's property in the form of husbands, wives, or purses, loud talking, brilliantly revolving amid glare of foot lamps and acclaim of clapping palms. The author of *Alcestis* merits gratitude for giving us something nearer nature. Josquin Dorioz, violinist and composer, Elisabetha Vaara, vocalist, are, thank Heaven, healthy man and woman, neither animals nor seraphs, but human creatures, with all infirmities that flesh is heir to, yet akin to the gods through the possession of a divine genius, sustained by loyal labour and devotion: true artists these—who find in art strength for sacrifice, comfort in trouble, satisfaction to the hunger of the soul.

The plan of *Alcestis* reveals so much of the purpose of the book that I will without apology give it somewhat in full. Josquin Dorioz, né Gasperein, son of French artist mother and aristocratic Viennese father, now deprived of both parents, escapes from the house of bondage, represented by the family mansion in Vienna, and fiddles his way to freedom and North Germany on the precious Straduarius inherited from his mother. Arriving hungry but aspiring at Dresden, he is taken under the protection of Nodin, buffo tenor, and Elisabetha Vaara, herself once rescued from beggary by Nodin for love of her superb voice. Elisabetha and Josquin become pupils together in the choir of old Adolphus Hasse, then in full swing of glory as composer of the severe contrapuntal school, untainted by romantic heresy. Elisabetha pure, "responsible," noble hearted (very like our old friend *Consuelo*), ever steadfast to the high call of her art, becomes a polar star to the career of Josquin, who is the fiery, impulsive, sensitively attuned creature to be expected from his inheritance of Viennese and French blood. To Elisabetha, to the ideal which she upholds and strives after, the erratic Josquin returns out of the temptations of popularity, passion, and pleasant ease. The young violinist is taken up by Faustina Bordoni, Hasse's wife, a faded star of operatic celebrity, now beneficently shining on rising lights; through success obtained in her salons, he becomes pet *protégé* and chamber musician to Count von Lichtenberg, a musical dilettante of the first water, refined to the verge of weakness, *blasé* of society, politics, religion, a seeker in art of the "illusions that shall carry him through the prosaic staleness of life." The Count has a niece, Cécile, irresistible in loveliness, before whom the heart of Josquin, artist-like responsive to beauty, melts into worship: there is also a pale abbé named Paradies, who writes Greek plays, and projects under the inspiration of Josquin's violin the scheme of a drama with Elisabetha as heroine and Dorioz as composer. Josquin, bound with gilded fetters of elegant conventionalities and delicious flirtation, and half content with servitude, grinds away obediently at composition and performance, though now and then the artist-conscience rebels, and bids him break away to tread again the "solitary path of genius," where Elisabetha beckons upward. When Dresden is beleaguered by Daun's army, Josquin Dorioz is

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away with the Lichtenbergs in Italy, and afterwards at Vienna; here increasing admiration easily won, Cécile growing kind, illusions manifold and brightly coloured threaten to sink the young artist into the mere popular player: his creative faculty, the jewel of his genius, dims, Elisabetha and the noble artistic career shine faintly in the background. But one night Gluck is in Vienna, the *Orpheus and Eurydice* is given at the opera house. Josquin, his heart in his ears, feels the call of the master; his soul rises up to meet the voice which summons him—the artist, to fulfil his mission; in the flood of fresh, strong music his soul receives baptism into renewed effort. A report that Elisabetha Vaara is playing out the last week of her performance at Dresden in one of Hasse's operas, gives Josquin the conclusive impetus; he starts for Dresden at once, and arrives at the theatre the closing night, in time to see the friend of his youth triumphant in the grand result of single-hearted devotion to her art.

Now comes the tragedy of our story. A period of quiet work and progress ensues, in which the artist pair work side by side; Josquin organises people's concerts of good music under Elisabetha's influence, and begins to work at his first opera "*Alcestis*," for which Paradies furnishes the libretto, and in which the Vaara is to be the heroine. The acceptance of the opera at the Dresden theatre will lie in the hands of Hof-Intendant Plauen, for old Hasse, now out of fashion, can do nothing for his pupil. But Plauen is in love with Elisabetha, and sees a rival in the composer of "*Alcestis*." Renewed love-passages with Cécile von Lichtenberg end in bitter disillusion and despair, and broken-hearted Josquin, further crushed by the refusal of his opera, collapses; the sensitive body gives way under the strain of mental anguish. At this crisis Elisabetha, whose friendship has been troubled by jealousy and the consciousness of unrewarded love, devotes herself to her prodigal. She buys the acceptance of Josquin's opera with the sacrifice of herself, and privately becomes the wife of the Count Plauen on condition of the immediate performance of "*Alcestis*" and concealment of her marriage till Josquin shall have left Dresden for Italy: if her friend is to die he shall at any rate know one great joy first, and the artist-soul which has been bound up so long with her own shall achieve reward. So "*Alcestis*" is performed, and Elisabetha, throwing out her soul into the part which has for her an awful significance of sacrifice, crowns love with thorns, as the house rings with plaudits for the happy Josquin, all unconscious of the price paid for his triumph.

The motive of *Alcestis* seems to be the aspiration of the true artist in contest with circumstance and temptation after a life harmonious with the ideal of his art: a life in which genius shall develop uncramped by conventional taste or exigencies of a struggle for bread; in which joy and pain shall be as golden harpstrings for the musician's fingers, and existence another word for devotion and fruition. But the artist finds—what Josquin found; a dilettante world in love with itself, ready to bid Apollo turn lacquey; or what Elisabetha found; a suffering world that will not let the tender woman-heart satisfy itself with song. This leading purpose of *Alcestis*, if I read it aright, is finely brought out; yet the plan of the story is better conceived than managed. The main point of the plot is Josquin as composer helped to the success of his supreme effort by that sacrifice of Elisabetha, to which even the title and the motto point. Yet this climax is hurriedly brought about at the end of the novel, a quantity of detail being compressed into the previous chapters to work up to the grand *coup*, which falls a little flat after all. True as this management may be to the natural order of circumstance, it

is artistically, I think, a mistake. The writer has like the painter to bring out his strongest motive even at sacrifice of detail and surrounding; to exaggerate gloom, like Rembrandt, that light may be more light; and the novel writer, working more artistically than a biographer who honestly records the succession of circumstances, must dwell upon the events that have the highest spiritual significance, thus presenting the story of a life as it would lie in the memory. Moreover from a musical point of view Josquin is too half-and-half a personage; he hovers between composer and virtuoso with an indifference that makes the character ring false. The creative spirit is always *master* in an artist who possesses the divine gift in any high degree, and the burning desire to produce some great work must have shaped and coloured Josquin Dorioz' life much more strongly than appears. Possibly the author of *Alcestis* would imply that absolute freedom and sympathetic surroundings are indispensable to the creative spirit, and so makes the hero feel no overpowering impulse to produce great things until free of dilettante patronage. Yet Haydn and Mozart wrote divinely while in court service, although bound to supply their due share of what Wagner aptly calls "*tafel-musik*." But where artistic power is so abundantly displayed it may seem captious to object to such finely strained failings. If the author of *Alcestis* betrays amateurship it is of the best culture: music does not often obtain so competent a biographer.

Space is barely left to descend upon the delightful studies of character, quite a little gallery of portraiture, or the fresh descriptions of Dresden, which serve as backgrounds for the *dramatis personae*, the quaint nooks of the old town, the "*Boccaccio gardens*" of the villa, or the perfumed salons, like Menzel's pictures of Sans Souci, where stately ladies recline resplendent under the wax lights, and Frederick supremely pipes among his fiddlers. The general reader, on whom the musical motive of the story is perhaps wasted, will yet find plenty to arrest and charm in *Alcestis*. The best compliment to the author may be to express the hope of seeing more work from the same hand in a field so little exhausted as musical romance. A. D. ATKINSON.

Snoilsky's Poems. [Sonnettes of Carl Snoilsky.] Stockholm.

WE have repeatedly had occasion in these columns to regret the poverty of original Swedish literature in our own time. The struggle of modern social life against the art of poetry has nowhere in Europe been more successful than in the Sweden of the last thirty years. It may be said that the poetry of that country has never risen much above mediocre merit; that there has always been something provincial, something local in its character; but at the same time it has had a consistent history, and took a definite national form long before German poetry, for instance, had emerged out of chaos. Wherever there exists a perfected language with a long range of literary traditions, there is always the chance that a world-wide writer may appear, full-fledged, at a moment's notice. No doubt Sweden is yet to have its great poet, no dilettante like Atterbom, no walking gentleman like Tegnér, not even an inspired minstrel of the border like Runeberg, the largest poetical figure at present on the Swedish horizon, but some one like Öhlenschläger fifty years ago, or the Norwegian Ibsen now, who will force the literature of his country on the attention of Europe by the sheer power of individual genius.

Carl Snoilsky, let it be confessed at once, is no such gigantic apparition. He must develop in a startling and quite unexpected manner before he can be hailed as the poet of the future. But this thin book of his, a mere

pamphlet of fifty sonnets, claims our attention as being the very best poetical work that we have met with among recent Swedish efforts. Since Runeberg retired and the last spasmodic wails of the Tegnèrian school died away, two representatives of those opposite types have occasionally claimed the public ear. For some years B. E. Malmström gave out at distant intervals those charming pseudo-classical idyls that presented the very best side possible of the Tegnèr influence. From distant Finland, Zachris Topelius, pupil and friend of Runeberg, continued the style of his master without force or originality, but still healthily and freshly. It is now several years since Malmström died, and his elaborately artificial verse, delicate as it is, will fill no place in the history of poetry, while the songs of Topelius become, year by year, more and more out of sympathy with new phases of thought and feeling. It may be that Snoilsky is the Malmström of his day; at all events there is an intellectual freshness and a delicacy of workmanship that has not been met with in Stockholm since the days of Malmström. In the dearth of poets, it seems that by force of these sonnets alone Snoilsky must rise to the first rank among his contemporaries.

These poems are the work of a man, presumably young, who rides on the crest of the intellectual wave of his day. They are surprisingly modern, and realistic to the point of prosiness. The author's aim—quite a new one for a Swede, by the way—is to take a subject that fills public attention at the moment, and to clothe it with Heinesque pathos and a delicate veil of verse, and set it up as a poem. Sometimes he is very successful; sometimes the ugly thing is too strong for him, and leers out unpleasantly through the shadows and the point-lace. For instance, there are four sonnets entitled *La Pétréuse*, which are intended to convey a vivid satirical picture of the horrors of the French commune, but the effect is clumsy and tame. These four sonnets, too, offer a good example of one of Carl Snoilsky's greatest faults, a tendency to enrich the Swedish language with a mass of foreign words dragged in unchanged. In the first of these, the unfortunate woman is addressed as Lutetia's Venus, and a little lower down we get such rococo forms as *chassepot-kulan* and *petroleum-effekt*. This latter barbarism ends a sonnet, truly a flat and unprofitable close.

But when Carl Snoilsky condescends to write pure Swedish, and to undertake subjects of a genuinely poetical character, he is often very charming. He seems to have read contemporary poetry to some avail; there are not wanting traces of Victor Hugo's influence, and he is a direct disciple of Heine, though not at all in the direction of the latest German writing. Occasionally we ask ourselves if he has not studied Swinburne. He is not a poet of strong objective tendencies, but rather a reflective and cultivated man of letters. He invites us, not to the mountain-tops, but into his park, where among the regular avenues and close-shaven lawns we find flowers from southern lands and statues half hidden in the leaves. In spite of all his would-be realism he is a dreamer, and the best that he can do is to show us a cloud-reflection of the great battles of the modern gods of thought. He sits in his marble portico, with the murmur of the leaves around him, and the birds bring him news of what is stirring in the work-a-day world. This is not great poetry, but it has delicate and valuable qualities of which Sweden may be proud. We hope to see more important works from this new poet, and for the present we are glad to welcome him.

EDMUND W. GOSSE.

LITERARY NOTES.

Mr. J. P. White's family have decided to publish (J. Russell Smith), after a delay of five years, the *Lays and Legends of the English Lake Country*, to which he devoted all his leisure

up to his death in 1868. The poems recall Scott when he is least animated and the later stiffer manner of Wordsworth when he lusted after double rhymes; still there are some—e.g. "Pan on Kirkstone," and "Laurels on Lingg Moor"—not without literary value; all have the interest which results from the union of fervour, clearness, and refinement. This refinement is of course quite compatible with the absence of such cultivation as goes with critical insight, of which there is a plentiful lack in the voluminous notes, which however contain some interesting details (especially those to the "Church in the Mountains"); but there is a great deal too much of mere genealogy, and, though this is not the writer's fault, it is too apparent that local tradition has become too confused and incoherent to yield much inspiration. Still, with all its drawbacks, the book is one that a tourist should be glad to find in a Lake Country inn, and perhaps this is all the praise the author would have desired.

Mr. Pearson has become possessed, under circumstances which are not explained, of the original MS. of Coleridge's *Osorio*, rejected by Sheridan in 1797, and "preserved from destruction by one of those strange and unaccountable freaks of chance or fortune which seem little short of miraculous." Such an observation piques a curiosity which it might have been well if possible to gratify; it might have been well also to give a parallel table of the names of the characters in the two editions of the play, as most of them were altered when the play was performed in 1813 at Drury Lane and had a run of twenty nights under the title of *Remorse*. The omission at one point in the cottage scene of the second act has led the editor himself into some confusion, where he says, "Zulimez replaces Maurice, who is only alluded to." Maurice, "the heroic Prince of Orange," is "alluded to" in both forms of the scene, though he is only named in the later, where no confusion could arise between him and the hero's faithful Moresco attendant, who was named Maurice in the first draught of the play. Still it is ungracious to look a gift horse in the mouth, and Mr. Pearson has given us means of instituting a very interesting comparison between Coleridge's work in 1797 and his work in 1812.

In its original form, *Osorio*, like Wordsworth's *Borderers*, written in the same year, manifestly owes its inspiration to Schiller's *Robbers*, though *Osorio* is the more independent and ingenious work of the two. Indeed it is less absurd and more poetical than its original; but after all it is less powerful; moreover the naïveté and simplicity for its own sake in which the self-indulgence of Coleridge at one time out-heroded the austerity of Wordsworth make the diction often tame and once at least ridiculous. Here in their authentic form are the famous lines about "dripping," which were the only reason Sheridan is known to have given for rejecting the play he had encouraged Coleridge to write:—

"Drip! drip! drip! drip!—in such a place as this
It has nothing else to do but drip! drip! drip!
I wish it had not dripped upon my torch."

In 1812 Coleridge had become a great religious philosopher, a great dramatic philosopher; he had profited by the plays of Schiller's manhood; he had acquired the "grand style" of the English theatre, the style which Lord Lytton's modesty led him to think had expired with Sheridan Knowles. As might be expected, the additions in *Remorse* are more important and characteristic than the omissions. The only one of consequence beside the well-known foster mother's tale is a spirited but incoherent scene where the inquisitor is captured, but respited until *Osorio* shall have been first despatched. In the published play there are important additions at both ends, intended to *afficher* a spiritual and dramatic purpose; there is a good deal of inflated writing, meant to raise the character of Teresa, the Christian heroine, who is pompously and elaborately withdrawn from the end of the incantation scene; and at all the important crises of the play the writing becomes more laboured and emphatic, and perhaps better suited to the stage.

The *Buda Pest Review* (*Buda pesti Szemle*), Nos. 2, 3, and 4, maintains the character of the first number (see *Academy*, vol. iv. p. 66). A large proportion of the space is given up to English, French, and German books and articles, which are

either analysed at considerable length or simply translated with but slight omissions. Of these we may mention Gregorovius' *Geschichte der Stadt Rom*, Leroy Beaulieu on Napoleon III., Cherbuliez on Lessing, and the *Edinburgh Review* on Grote's *Aristotle*. Among the poetical contributions are what seems a successful version of Burns' *Tam o' Shanter* by Arany and a translation of Tennyson's *Elaine* and *Ginevra* by Szász. We have among the original articles a review of Dóczi's translation of Goethe's *Faust*, in which extreme violence has been done to the genius of the Hungarian language, the translator being in fact a German, who presumes too much on a supposed mastery of Hungarian. Also two excellent historical contributions, one by Pauler (Gyula) on the conspiracy of the Palatine Wesselényi, 1666-1667; another by Szilágyi (Sándor) on the policy pursued by the Turks towards Transylvania, 1657-1686. The notices of Hungarian books are almost uniformly unfavourable; of non-Hungarian books we have intelligent and favourable critiques of Sayous' *Histoire des Hongrois*, and of Szaranievicz' *Kritische Blicke in die Geschichte der Karpathen Völker* and *Die Hypatios-Chronik als Quellen-Beitrag zur österreichischen Geschichte*.

Professor Fryxell has just published the 41st part of his interminable *Studies in Swedish History*. The first part of this celebrated work appeared in 1823, and consequently it has taken the author exactly half a century to travel from the earliest times down to the year 1770. The new part treats of the intrigues with Russia and Prussia, and the internal struggles between the Moss and Hatt parties at court, under Adolphus Frederick II. (1765-1770).

The eminent Danish antiquary, Professor Warsaae, has just brought out a valuable little treatise, *Russlands og det skandinaviske Nordens Bebyggelse og ældste Kulturforhold*, the object of which is to prove that the earliest culture in the north of Europe came originally from Asia and North Africa, and that the movement of civilization since the beginning of the Stone Age has taken the same north-easterly direction.

We have received what is announced as the first volume of a complete edition of the *Tagebücher* of Fr. v. Gentz, edited by Fraulein L. Assing from the *Nachlass* of Varnhagen v. Ense. It only differs from the volume published twelve years ago, containing the very interesting *Journal politique* kept by the author in 1809 during the negotiations after the battle of Wagram, by the addition of 100 pp. of the Diary (also in French) kept in 1815 at Vienna and Paris, the substance of which is so uninteresting that we can scarcely regret the destruction of the original MSS. for the earlier years, or question the discretion which led Gentz to resolve on the abridgment of the whole. What is now first printed is a mere list of names and social engagements without either personal or historical interest.

The *Nation* (Sep. 11) gives a pleasant account of the ardour with which the students and professors of the "Anderson School of Natural History," newly located on the island of Penikese, have held their first summer session. Besides constant lectures from Prof. Agassiz and other able volunteers, the students (who are of both sexes) have every opportunity for practical work and independent investigation given them by the dredging expeditions of the yacht, lately presented for that purpose to Prof. Agassiz. There is room, we should think, for an institution of a like kind on the English coast.

Art and Archaeology.

Guida del Palatino, compilata da C. L. Visconti e R. A. Lanciani. Roma. 1873.

THIS little work deserves to be better known to scholars and archaeologists in England than appears to be the case. Although its primary object is to serve as a local guide-book to the recent excavations on the Palatine Hill, yet that site is so important, and the discoveries made there of late years

have thrown so much new light on the history of Rome, that a good account of them in any form should meet with immediate attention. The authors are two of the best local antiquaries in Rome. The Cavaliere Visconti, beside his hereditary claims to our regard, has a wide reputation; and Signor Lanciani, his pupil and friend, and secretary to the Archaeological Commission of the Municipality of Rome, makes it his duty to keep constant watch over all excavations and researches—a duty which he performs *con amore*, with remarkable activity and zeal. These two are joint editors of the *Bullettino della Commissione Archeologica Municipale* (*Academy*, vol. iv., p. 273).

The work before us is carefully and diligently compiled from the best authorities, and is entitled on the whole to warm praise. It has only one drawback, which is that the authors naturally see everything through the coloured spectacles of the local "Roman traditions," which are merely the conjectures of learned men of a few past generations, who had less opportunity for forming a correct judgment than we now have. The recent excavations themselves have upset many old opinions, and the leading principle of the modern science of archaeology, that of choosing historical types of each period, and comparing the details of all other buildings with such types, has upset several others. The authors before us, excellent antiquaries as they are in many respects, have not yet seen this, but can only run in the old grooves to which they have been accustomed: still, it is only here and there that the work is seriously affected by this failing, and on the whole it is a trustworthy and valuable guide.

They begin in a preliminary advertisement by showing that the whole of the Palatine is now for the first time restored to the public (with the exception of the part covered by the monasteries, which are not *as yet* disturbed), and to point out how much has been done on that ground since 1848. In that year the court of Russia began at the north-west corner by purchasing what was then a vineyard, called the Vigna Nusiner, and making great excavations there, including some of importance under the church of S. Anastasia. Though the search for statues, the discovery of which was the immediate object of the works, was unsuccessful, the Baron Visconti saw the importance of the excavations for historical purposes, and came to an arrangement, by which he gave for the Russian Museum certain duplicate statues from the Museum of the Vatican in exchange for the Vigna Nusiner, which the Russian Government was glad to be rid of.

The ground ready excavated thus became the property of the Pontifical Government, and the Minister of Public Works bought another adjacent vineyard called the Vigna Buttèroni, formerly known as the "Vigna del Collegio Inglese," and the Orto Roncioni was now incorporated with it. By this arrangement the whole of the western slopes of the Palatine became the property of the Pope, and were gradually excavated. In 1860 the Farnese Gardens, which occupied about half of the summit of the hill, were purchased of the ex-King of Naples by Napoleon III., and Signor Rosa was appointed to superintend the works. There is reason to believe that they were originally undertaken with the same object as the Russian Government had in view, and that neither the Emperor nor his employé was aware how thoroughly the ground had been searched for statues when the Farnese Gardens were laid out, of which a full account was published by Bianchini in 1726. The great museum of Naples is full of statues found on the Palatine at that time. But as general attention had now been drawn to the historical importance of these excavations, they were continued with much public spirit for ten years, mainly, how-

ever, with the object above mentioned. A museum was built on the Palatine to secure such of the antiquities found as were not worth sending to Paris; and other objects were brought to the Palatine by Signor Rosa, such as sculptured sarcophagi, &c., to form the nucleus of a new museum there.

These excavations brought to light some palaces of the Cæsars, and some of the walls of the Kings, which had been used as foundations for them. To these palaces, belonging to different periods, names are given not always very happily; some it has been found necessary to change, and others are still erroneous. It is now evident that these palaces were great public works, carried on systematically during three centuries by order of the Senate, and only called after the emperor in whose time each part was built. The Emperor Nerva had them inscribed with the words *AEDES PUBLICAE*. What is called "the Palace of Tiberius" is really of the time of Trajan and Hadrian, built on the site of the old *Regia* of the Kings; the true Palace of Tiberius is on the west side towards the *Circus Maximus*. The "Palace of Caligula" is set down at the top of the Palatine, near that of Hadrian, and yet we are distinctly told by contemporary authority (Suetonius, *Caligula*, c. 22) that it was at the bottom, near the *Forum Romanum*, and that the temple of Castor and Pollux, at the south-west corner of the Forum, was used as a vestibule to it: indeed, there are considerable remains of it joining on to that temple, together with part of the bridge across the Forum. What is called the "Palace of Augustus" (under the Villa Mills) is not of the Augustan period, but is a part of the great public building of the time of Domitian. This is clearly shown by reference to the plan, and by the fact that brick stamps of Domitian were found in the walls by Nibby. What is called "the House of the Father of Tiberius" is really the house of Hortensius purchased by Augustus, with the additions made to it by order of the Senate, as recorded by Suetonius (*Octavianus*, c. 72), Dion Cassius (lib. liii. c. 16), and in this part, which was built for state apartments, the beautiful frescoes were found. The great oval reservoir belonging to it, miscalled a *piscina*, is not a filtering-place, but a large cistern, such as Frontinus called a "*Castellum Aquæ*." There are no buildings of the time of Nero on this part of the hill, but his Golden House extended to that part of the Palatine called the *Velia*, and there are remains of it near the Basilica of Constantine. The palaces at the south end, with the Stadium, are chiefly of the time of Septimius Severus, in the third century. Further details would be scarcely intelligible without the plan attached to this work, which, though better than that published in photography by Signor Rosa, is not altogether so satisfactory as some others we have seen. The work, in this quarter, however, is still going on so rapidly that any plan soon becomes obsolete.

These excavations and researches, which are certainly the most important hitherto undertaken, are chiefly in the *Forum Romanum*, at the point where it touches the foot of the Palatine Hill. The foundations of the round temple of the Vestal Virgins have just been discovered at this corner in front of S. Maria liberatrice.

JOHN HENRY PARKER.

NOTES ON ART.

A statue of our great English potter Thomas Wedgewood has recently been placed in the Institute at Burslem. Mr. Gladstone, in a letter received on the occasion of the unveiling of the statue, tells us that "observation and reflection" have led him to regard Wedgewood "as perhaps the most distinguished individual in the whole history of commerce taken from the

earliest ages." Seldom indeed have the interests of art and trade been so successfully united as by him. Miss Meteyard, his admirers will be glad to hear, is about to publish another volume of autotype reproductions from his choicer and rarer works mostly in the collections of Dr. Sibson, Mr. Roger Smith, and Mr. Bowker.

The *St. Petersburg Journal* states that the Russian Government has determined to establish schools of design in the manufacturing districts of Russia, with the view of spreading the advantages of an artistic education and developing an artistic taste among the artisan classes. These schools are to be founded by the municipalities, merchant corporations, and artistic societies of Russia, but when necessary the Government will materially assist in their foundation, besides according them an annual grant. The classes are to be open free to pupils of every age and condition who know how to read and write, and special classes will be established for girls. The pupils will be furnished with all the materials necessary for their study at the lowest possible charge, and in the case of the poorest even this payment will be remitted. The schools, wherever it is practicable, will be annexed to some art museum or permanent exhibition of artistic models, and each pupil will be allowed not only to visit the museums, but to copy the works they contain. Thus we see that the example set by South Kensington is being followed even in Russia.

An excellent portrait of Faraday, engraved on steel by Jeens from the well-known photograph by Watkins, has been presented to the subscribers to *Nature* with the number for September 18th. It is further promised that this shall be only the first of a long series of portraits of scientific worthies issued in connection with that journal.

Admirers and critics of the works of the last of the great Venetian painters, Paolo Veronese, will find in the number of the *Revue des deux Mondes* for Sept. 1st a critical history and description of some frescoes by him in the Villa Barbaro, near Venice. These frescoes have hitherto attracted little notice, but they have been recently carefully cleaned by the present proprietor of the Villa, Signor Angelo Giacomelli, and according to the critic of the *Revue* deserve to be reckoned among Veronese's finest decorative works. The most important is a representation of Olympus, with figures of colossal size. Strange to say the gods and goddesses in this painting are not partaking of any sumptuous repast, such as Veronese usually loved to offer to his characters, whether mythological, angelic or divine. Not even Hebe or Ganymede, so far as we can understand, is present to pour out draughts of nectar for the thirsty immortals.

Besides this grand fresco of Olympus, there are in the great hall of the Villa eight allegorical figures by Veronese, which are highly praised for their nobility of form, freshness of colour, and fine decorative effect.

The colossal figure of Germania surmounting the Column of Victory recently unveiled at Berlin in commemoration of the battle of Sedan was modelled by Herman Schies, of Wiesbaden. The artist has represented Germania as a winged female figure, holding in her right hand the laurel crown of victory and in her left the German banner with the eagle and iron cross. The figure stands on a pedestal of grey sandstone, at the corners of which are German eagles watching over French trophies. The names of the four principal battles of the late war—Weissenburg, Wörth, Sedan, and Paris—are written beneath, and on the base of the pedestal is a long inscription, besides the names of more than 400 of the Nassau infantry who fell fighting for their country. Herman Schies was a pupil of Hopfgarten in Wiesbaden, and afterwards of Drake in Berlin. His fine figure of Germania in the churchyard of Kirchheimbolanden, in the Palatinate, has been much extolled by German critics, and no doubt led to his being chosen as the sculptor of the great national memorial at Berlin. He has also, it is said, received a commission for another Germania to be set up at Saarbrücken.

The *Portfolio* for September is enriched by a charming little etching by G. Greux from a picture by Theodore Rousseau. The soft brilliancy of execution and the warmth of colour in

this small plate cannot be too highly praised. It was courageous of P. G. Hamerton, admirable etcher though he be, to place an etching of his own beneath it. An article by F. W. Burton on the Castellani Collection in the British Museum is of much use in calling attention to the inestimable value of some of the early Greek sculptures in that collection. The large female head in bronze, the "presiding divinity of the whole," Mr. Burton considers to "stand quite peerless amongst the treasures of Hellenic art at present extant."

In spite of Dr. Julius Meyer's seemingly exhaustive treatise on Antonio Allegri da Correggio originally published in the *Allgemeines Künstler-Lexicon*, and afterwards printed in a separate form, another memoir of the painter has been recently put forth by the Chevalier Quirino Bigi which, says the *Architect*, contains some new facts that entirely contradict all our recently gained knowledge concerning Correggio and his circumstances. These facts have, we are told, been derived from documents found in the archives of Correggio and Parma; but these archives had been well searched before Dr. Meyer wrote, and we can scarcely suppose that they have since then yielded any very abundant harvest of new material.

The town councillors of Lüneburg propose to sell the whole of the valuable and ancient silver plate belonging to the town, which includes work by Benvenuto Cellini and other artists of note; one offer for the purchase of the whole collection has been declined, in the hope, it is said, of larger bids to come from England.

New Publications.

- ARNOLD, E. Hero and Leander; from the Greek of Musaeus. Cassell.
 BOOTH, J. Epigrams, ancient and modern. Hotten.
 CATALOGUE de la Collection de M. John W. Wilson, exposée dans la galerie du cercle artistique et littéraire de Bruxelles, au profit des pauvres de cette ville. Paris: imp. Claye.
 COLERIDGE, S. T. Osorio: a Tragedy in Five Acts. Pearson.
 HUGO, Victor. La Libération du Territoire. Paris: Michel Lévy frères.
 KUGLER, F. Geschichte der Baukunst. 5 Bd. Geschichte der deutschen Renaissance v. W. Lübke. 4 Abth. Stuttgart: Ebner und Seubert.
 LACROIX, Paul. Manners, Customs, and Dress during the Middle Ages. Chapman & Hall.
 OEUVRES complètes de Melin de Saint-Gelays. Edition revue, annotée et publiée par Prosper Blanchemain. Paris: Daffis.
 PAULUS, E. Ludwig Uhland u. seine Heimath Tübingen. Berlin: Grote.
 RIS-PAGUOT. Dictionnaire des marques et monogrammes des Faïences, Poteries, et Porcelaines anciennes et modernes. Paris: Delaroque.
 SAND, George. Le Château de Pictordu. Paris: Michel Lévy frères.
 STRUMPELL, G. Das französische Madrigal vom 16. bis 19. Jahrh. Braunschweig: Meyer.
 VIOULET-LE-DUC, E. Dictionnaire raisonné du mobilier français. Vol. v^{me}. Fasc. 2^e. (*Armes de guerre offensives et défensives*.) Paris: Morel.
 VIOULET-LE-DUC, E. Lectures on Architecture; translated from the French by B. Bucknall. Part i. Paris: Morel.

Theology.

Rational Theology and Christian Philosophy in England in the Seventeenth Century. By John Tulloch, D.D. 2 vols. William Blackwood and Sons, Edinburgh and London. 1872.

FOR varied and intense interest no past century of English history can compare with the seventeenth. The politician, the theologian, and the philosopher alike look back to it as a period of all-important revolution and change; and in these two volumes Dr. Tulloch has given us a study of one of its most significant phases—a phase, the close resemblance of which to our modern Broad Churchism must, as he observes, "strike every attentive reader." "The highest movement of Christian thought," as Dr. Tulloch characterises it, in that

stirring theological era, was neither Anglican nor Puritan in its sympathies, and consequently neither Anglican nor Puritan writers have vouchsafed it much attention. In an age of the fiercest religious controversy it was anti-polemical in its spirit. Its cause was pleaded rather from the study than the pulpit. And at a time when Owen, Baxter, and other divines of the Puritan school were filling the land with folios and quartos, the calmer thinkers to whom we are here introduced—whose more sparing utterance claims comparatively so modest an allotment on the library shelf—were conceiving in a higher atmosphere of thought works in which a generation increasingly weary and neglectful of controversial divinity, may find a literature at once rational, philosophical, and Christian.

The first volume is devoted to a group of "Liberal Churchmen"—comprising Lord Falkland, John Hales of Eton, Chillingworth, Jeremy Taylor, and Stillingfleet. Two introductory chapters—the first on the Spirit of Rational Inquiry in Protestantism, the second on Religious Opinion in England from the Reformation—put us in possession of the author's standpoint, and of his estimate of the relation of his subject to preceding experiences in the Church's history. The generous and cultured spirit in which the Reformation took its rise died out, according to Dr. Tulloch, under the "unhappy influence" of Luther and Calvin; dogmas and confessions multiplied, but inquiry came to a standstill, "arrested by the necessities of the age." A rigid Augustinianism was inculcated at the continental seats of learning, from Louvain to Geneva; and in Germany a noble theological activity degenerated into frivolous dialectical discussions that recalled the puerilities of the old scholasticism. From this state of things Arminianism only represented an inevitable reaction, and it is to the influence of Arminius, together (though in a very secondary degree) with that of Hooker's *Ecclesiastical Polity*, that Dr. Tulloch traces in "all the subsequent development of Protestantism" "a nobler and more comprehensive thoughtfulness and freshening life." Without here calling in question the general accuracy of this representation, we must nevertheless demur to the statement that "historical criticism in the modern sense took its rise in the Arminian school." The honour of initiating the historical method in relation to biblical studies undoubtedly belongs to Erasmus, whose claims to this distinction have been lucidly pointed out in a volume to which Dr. Tulloch more than once refers—Mr. Seebohm's *Oxford Reformers*. Again, it is not very easy to reconcile the statement respecting Tyndale, at p. 40, that "he showed himself in his doctrinal conclusions independent of Augustinianism," with the assertion on the following page that "his leanings were Augustinian, even of a somewhat strong type." The fact really being, that Tyndale, whose doctrinal views were for the most part an echo of those of Luther, was an Augustinian of the most pronounced character.

The sketch of Lucius Cary, Lord Falkland, known to many only as the high-minded and moderate politician, is interesting as exhibiting him in another light, as the centre of a distinguished literary circle, and held by them in such esteem that in Cowley's eulogistic language,—

"—— learning would rather choose,
 Her Bodley or her Vatican to lose."

Dr. Tulloch satisfactorily establishes the fact that the honour of educating Falkland belongs to St. John's College, Cambridge, and not to the foundation of the same name at Oxford; from Mr. Forster's theory, that Falkland was privy to the arrest of the Five Members, he altogether dissents; and in the more important question of his political consistency, shows that he throughout pursued an unvarying

middle course between the demands of the Puritans and the aggressions of Anglicanism. Falkland was a liberal Churchman, and, born out of due time, fell the "martyr of moderation." The sketch concludes with an analysis of his *Discourse of the Infallibility of the Church of Rome*, and Falkland needs no higher eulogium than that which describes him as one who, while "shrinking from revolution in Church or State, would have liberalised both, in a truer and nobler sense than his contemporary revolutionists, ecclesiastical or political."

Not less a "martyr of moderation," though in a different fashion, was John Hales of Eton, for whose abilities and learning Bishop Pearson always professed such enthusiastic admiration, the coadjutor of Savile in his learned labours, and author of the famous tract *On Schism*. In the capacity of chaplain to Sir Dudley Carleton, Hales was present at the Synod of Dort, and his letters furnish perhaps the best account of the proceedings of that memorable assembly, to which Dr. Tulloch accordingly devotes a large amount of notice. It seems unquestionable that the Remonstrants on that occasion, notwithstanding the ability and eloquence of their leader Episcopius, were most unfairly used. Hales, shocked and pained beyond measure at what he witnessed, then and there, to use his own expression, "bade John Calvin good night," though, according to Dr. Tulloch, he did not "say good morning to Arminius." For the charge of Socinianism, brought against him by Aubrey, there seems to have been no foundation whatever. Amid the uproar of contending parties, Hales was a dispassionate seeker after truth. "For this," he said, "I have forsaken all hopes, all friends, all desires." His heroism met with the usual reward. When the Revolution came he was driven from his residence at Eton College and from his canonry at Windsor; his poverty compelled him to part even with his library; and he died at Eton, in the house of a widow, whose husband had been his servant, in poverty and obscurity. "A Churchman without narrowness; a friend of authority, who must yet have hated in his heart and deeply felt the folly of Laud's tyranny."

The sketch of Chillingworth is singularly interesting, and the criticism on the *Religion of Protestants* may be looked upon as the best account of the work that has yet appeared. It is no slight testimony to the real candour and honesty of the book, that though undisguisedly hostile to the theories of the Anglican Church, it was formally buried, at the same time as its author, with a series of Puritan anathemas that might compare in spirit, if not in length, with the immortal curse of Bishop Ernulphus.

The relation in which Jeremy Taylor and Stillingfleet, who come next, stand to the Liberal party, is characterised by Dr. Tulloch as "peculiar." Both contributed by a single important work—the former in the *Liberty of Prophecy*, the latter in the *Irenicum*—to the advancement of a movement with which "neither their special reputation nor the prevailing character of their theological activity has identified them."

In the second volume—which is devoted entirely to the Cambridge Platonists—the subject-matter has necessitated both deeper research and severer thinking; "the rational spirit," as the writer says, "broadened, and took to itself larger intellectual elements. It extended beyond the sphere of the Church, into the whole region of spiritual thought and philosophy." Unlike Hales, Chillingworth, and Taylor, the Cambridge Platonists were men who came from the Puritan side, and were all, with the exception of More, educated at the new Puritan foundation of Emmanuel,—Emmanuel, which in the seventeenth century outnumbered St. John's, and both in numbers and reputation was little inferior to Trinity.

In the introductory chapter, on the Historical Position of the Cambridge School, Dr. Tulloch assigns as the chief causes of this remarkable movement, the reaction that set in after the great Calvinistic triumph at the Westminster Assembly,—the philosophic speculation of the age, Baconian as well as Cartesian,—the renewed study of Plato and the Neo-Platonists,—and the instinctive protest evoked by Hobbes' strange apotheosis of external law as the sole and ultimate standard of morality. Of the new school, Whichcote, provost of King's—an appointment made when the Puritans were in the ascendancy, and seeking to remodel the university after their own mind—seems entitled to be regarded as the founder. A man of no great erudition, but of considerable powers of thought, wise, and broad-minded, he exercised as afternoon lecturer at Trinity Church, at a time when sermons ranked somewhat higher in the general estimation, a singular influence over the more thoughtful younger members of the university. It is evident however that Whichcote, like many other men of note in their day, was largely indebted for his popularity to some charm of personal influence and manner which his writings could not transmit. So far at least as his extant performances enable us to judge, he possessed rather a fine appreciation of high thought than original power. His sermons, as known to us, seem to be estimated by Dr. Tulloch somewhat above their deserts; his correspondence with his old college tutor, Tuckney, who remonstrated with him on his novel doctrines in the pulpit, and from which we have here copious extracts, strikes us as somewhat dull; and the "Aphorisms," where not evidently an echo of preceding thinkers, are sensible rather than brilliant. If indeed the sentiment quoted on p. 103,—that "God will not reject malign dispositions which will not be altered and subdued to the temper of heaven,"—is correctly given, it certainly seems no very favourable specimen of his expansive tolerance.

The genius of this Cambridge band was probably John Smith of Queens' (not Queen's, as it is here printed), a thinker "dead ere his prime." With greater originality than Cudworth, and less eccentricity than More, he left behind him nothing but "Discourses," delivered in the college chapel—a volume however which attests the possession of powers of a very uncommon order; and Dr. Tulloch scarcely exaggerates their merits in saying that "an ineffable light of spiritual genius shines in them all." "Powerful and massive in argument, they are," he adds, "everywhere informed by a divine insight which transcends argument. Calmly and closely reasoned, they are at the same time inspired. The breath of a higher, diviner reason animates them all."

Cudworth and More follow next. Dr. Tulloch does not appear to have consulted the unpublished manuscripts of the former at the British Museum, but those whose leisure does not admit of their attempting the perusal of the *Intellectual System of the Universe*, will here find an admirable criticism of that imposing *torso*. The argument is still that which theologians will perhaps always prefer as the most satisfactory reply to the inferences that are supposed to attach to the Darwinian theory.

To the estimate of Henry More, the poet and enthusiast rather than the philosopher, no exception can be taken, unless indeed we are inclined to accuse Dr. Tulloch of too respectful a treatment of the mystic extravagances of the recluse of Christ's College. His statement however that More "nowhere discusses or shows any interest in the doctrinal differences of Calvinism and Arminianism," is not quite correct; for we find in the edition of More's Theological Works, published 1708, that he is at some pains to propound a *media via* between the two doctrines, and plainly

expresses his belief "that whosoever is damned, it is long of himself."

Another brief chapter is devoted to the minor lights of the school, among whom Culverwel, in his treatise *On the Light of Nature*, arrests the attention as a vigorous repudiator of the Platonic doctrine of innate ideas; and this, it is to be observed, in apparently entire independence of Hobbes—whose *Leviathan* came out only one year earlier—and nearly thirty years before the appearance of Locke's Essay. In the concluding chapter the position of these illustrious thinkers, in relation to Church policy, is carefully distinguished from that of modern Dissent;—"the latter," says Dr. Tulloch, "by the pressure of its special dogmatisms crushes all further spirit of Christian inquiry, and, within its own pale, or as far as it can, all freedom of thought;" the theory advocated by the former was that of a Church that "had no final element of control except the collective national will."

On reviewing in the aggregate the characteristics of this party, it may be said that its main significance lay in the protest which, in theology yet more than in philosophy, it asserted against the developments of mediævalism. The ancient symbols and confessions, in their opinion, "had no other design but to testify, *not what was to be believed*, but what the authors of them themselves believed." Chillingworth himself declared that, in subscribing the articles of the Church, he intended nothing more than "a general approval of her doctrine,"—he accepted them as "articles of peace." To the mediæval belief in the infallibility of general councils, a belief in which even Luther so largely shared, both John Hales and Jeremy Taylor gave scarcely more countenance than Gregory Nazianzen himself. Falkland, from his seat in the House of Commons, while warmly defending the institution of the episcopal order, distinctly repudiated all notion of their existing *jure divino*. Cudworth, in his treatise *On the Lord's Supper*, not merely rejects the doctrine of the Real Presence, but regards the rite as non-sacrificial and simply commemorative.

On the present value of the literature bequeathed us by this school it would be unwise to insist too strongly. Many of their views have been urged with a sounder erudition, and far more effectively, by the modern representatives of the movement; many of them have been definitely abandoned. But the appearance of such a school, in such an age, is a very interesting and noteworthy phenomenon indeed, and to exhibit it in its true historical relations becomes consequently a matter of paramount importance. But here Dr. Tulloch's treatment appears, to say the least, somewhat defective, inasmuch as he has either passed over with insufficient notice or has altogether neglected certain factors in this notable development of free thought which cannot justly be disregarded.

In the first place, the liberal theology of the Cambridge Platonists was a distinct tradition from the Greek Fathers. It was from the study of writers like Origen and Clemens Alexandrinus that they drew courage to shake off much of mediæval doctrine. For their knowledge of those Fathers they were mainly indebted to the labours of Erasmus—an obligation which Stillingfleet himself recognises so emphatically, and to which he mainly attributes the Reformation. Yet with reference to this source of inspiration Dr. Tulloch is almost altogether silent; and his silence is all the more remarkable in that Dean Stanley—to whom these volumes are very appropriately dedicated—has already drawn attention, in his *Eastern Church*, to the importance and value of the tradition. It seems singular, when we hear so much about Arminius, to miss all reference to these earlier but not less influential thinkers.

Again, looking at this as essentially an academic movement (so far at least as concerns the writers treated of in the second volume), we should have expected a careful study of the points of contrast which it presents to similar preceding efforts. The schoolmen and the Cambridge Platonists had characteristics in common, which seem to call for some examination of those of difference. Both accepted, as a starting point, the truth of Christianity, and both then proceeded to approve it to the reason;—the former rather to the logical faculty, the latter to the understanding. Albertus and Aquinas, not less than Cudworth and More, sought to devise that system of reconciliation of which Occam, like Bacon, despaired. But Dr. Tulloch appears to have started with the assumption that the writers with whom he is concerned had nothing to do with the schoolmen, and that assumption has more than once led him into grave misrepresentation. One instance must suffice. Speaking of Whichcote, he says, "He moves in an ideal and open atmosphere, *unfamiliar to the school-theologian*. Truth is not embodied to him in this or that form of divine assumption, standing apart from the ordinary cycle of human knowledge and experience. Religion does not displace, or supersede, or make an extraneous addition to other truths. It is apprehended as the summit and ideal of all others." In illustration of this statement he quotes from Whichcote's "Aphorisms" the following sentiment: "God hath set up two lights to enlighten us in our way: the light of reason, which is the light of his creation; and the light of Scripture, which is after-revelation from him." Now we have only to turn to the *Summa* of Thomas Aquinas (*Prima Secundae*, quæst. 68, art. 2), and we find these words: "Ratio autem hominis est perfecta dupliciter a Deo; primo quidem naturali perfectione, secundum scilicet lumen naturale rationis; alio autem modo quodam supernaturali perfectione per virtutes theologicas. Et quamvis hæc secunda perfectio sit major quam prima, tamen prima perfectio perfectioni modo habetur ab homine quam secunda: nam prima habetur ab homine quasi plena possessio, secunda autem habetur quasi imperfecta." Making use of a beautiful metaphor, the schoolman then adds: "Sol quia est perfecte lucidus, per seipsum potest illuminare; luna autem, in qua est imperfecte natura lucis, non illuminat nisi illuminata." Precisely the same thought is to be found in the third chapter of the *Contra Gentiles*; and in fact it is in every way probable that Whichcote's "aphorism" was nothing more than an unconscious echo of what he had heard of the *Summa*, as expounded in the lecture room.

Finally, while too neglectful of the patristic and scholastic relations of his subject, Dr. Tulloch seems to us to have exaggerated the influences of Arminianism. Long before Arminius the controversy respecting free will had been waged by his fellow countryman, Erasmus, against Luther; and long after Arminius his doctrine was espoused by some of the fiercest opponents of religious freedom. Even among those whose lives and writings Dr. Tulloch has here set before us, two—Falkland and Culverwel—appear to have been as stoutly Calvinistic as any divine in the Westminster Assembly; nor is it to be forgotten that, at the very time this Calvinistic movement was at its height, it devolved upon the Calvinistic party on the continent, as represented by Pascal and the Jansenists, to assert the cause of spiritual freedom against the Jesuits, who were Arminian to a man. It must however be admitted that these two volumes contribute materially to the refutation of Buckle's overstrained theory, that the "professors of Calvinism are more likely to acquire habits of independent thinking than those of Arminianism." Meanwhile we note, not altogether with satisfaction, that as in the last century Cambridge was indebted

to Principal Wishart, of Edinburgh, for an effort to preserve the memory of Whichcote, so, in the present day, it is to learning and research across the Tweed that she owes this careful, and in many respects very able, study of perhaps the most brilliant circle of thinkers that the university has known.

J. BASS MULLINGER.

Ewald's Theology of the Old and New Testament. [*Die Lehre der Bibel von Gott, oder Theologie des A. und N. B. von H. Ewald.*] First Vol. Doctrine of the word of God. 1871, pp. 474. Second Vol. 1873, pp. 350. Leipzig: Vogel.

PROFESSOR EWALD'S new book is too important to be left unnoticed till it attains its completion. Yet we could wish to have the whole work in our hands before writing any estimate of its value. For the book is as much a system of digested Dogma as a Biblical Theology in the usual sense of the word; or shall we rather say that for our author the modern distinction between Biblical Theology and Dogmatic does not exist. He judges it possible to frame by a single process a harmonious organism of systematic doctrine resting on the Bible, without the intermediate labour of partial inductions which forms the basis of the Biblical Theology of the moderns.

Ewald in truth has never been fond of showing to his readers details of inductive or dialectic analysis. His method of treating history shows a peculiar power better known in another branch of science. It is well known that first-rate genius in mathematics is characterized by the faculty of attaining by an immediate intuitive construction results which other thinkers can reach only by analysis. Ewald's greatest discoveries have been made in the same way; but he has not been always so alive as the mathematicians to the necessity of backing up the intuitions of genius by processes of analytical verification, which are not only more intelligible to most minds, but frequently are the only sure means of detecting the errors of a too bold construction.

When we say that in the volumes before us Prof. Ewald has commenced a gigantic application of his favourite synthetic method to the new and more difficult problem of dogmatic construction, we are far from implying that the work which we are characterizing is one of speculation disjoined from Biblical fact. No man has such a hold of Biblical minutæ as our author, and the present treatise not only rests on the vast mass of observation and combination already laid before the public during fifty years of unparalleled literary activity, but presents us for the first time with a profusion of new and subtle hints and delineations of points of Biblical detail, all worked up into the system with that power of universal absorption which is so characteristic of Ewald's theories. Nothing can be more imposing than this kind of work. Every reader of Ewald's most finished productions—such as his general introduction to Hebrew Poetry—has felt the impress of power pertaining to a treatment of the subject which, beginning apparently with a bare definition, gradually swells out into a rich organic complex, into which every historical fact is successively taken up, apparently without effort or hesitation. But no previous book has given so brilliant an illustration of this power as the "Biblical Theology." Nowhere has the variety of facts been so great, or the organic scheme of thought in which they are comprehended so extensive.

It must be added that so extraordinary a display of intellectual power does not fail to excite some misgivings. We are never thoroughly assured of the soundness of an evolution of thought which is not guided and tested by dialectic, or of the certainty of a combination of observations that has not been checked off by the usual processes of inductive analysis. And our suspicions become graver when the thought developed is so large, and the observed facts to be combined and subsumed under the thought so numerous, as in the present

case. Ewald, no doubt, would urge that the very number of details of Biblical statement which he fits into his construction is a proof of its justice. The natural philosopher has no better test for the correctness of the curve which expresses a new law than the number of observed points that lie on it. But it must not be forgotten that the Biblical phenomena which lie before the theologian are not pure and simple facts; they are both complex in themselves and always more or less coloured by subjective elements of exegesis. No man is so infallible that his exegesis is not in a measure attracted towards his dogmatic prepossessions and *vice versa*, and a very slight displacement of each of a vast number of facts may produce a serious deflection of result which can only be checked off by processes of verification.

As Ewald's generalisations from facts cannot be viewed as secure till they are tested by inductive analysis, so the balance of parts in the organization of his system certainly desiderates sharp dialectic treatment. To our mind this is the main fault of the book. We always expect of Ewald that his generalisations from facts will be instructive even where they are not conclusive; but systematic thought not dialectically developed is either absolutely right or absolutely worthless as *system*. But of strict dialectic Ewald seems incapable. He is ready to offer in its place the richest concrete illustration or historic evolution of his thought. Some of the finest passages in the first volume are in fact long synthetic justifications of thoughts which demand for the purposes of dogmatic an incisive dialectical treatment. The first of the three great questions pertaining to Revelation which our author puts concerns "the essential nature of the Revelation of God's word." This question is answered in an elaborate historical survey of the progress of Revelation from the moment when man first felt the need of converse with God to the fulfilment of all Revelation in Christ. With this survey is inwoven much beautiful thought as to the relation of Revelation to the fear of God and its results in the establishment among men of the highest spiritual fellowship of life and truth. But the whole of this imposing essay, eminently instructive as it is, fails to bring the matter to the point. We are made to feel Revelation, to see it growing in history, to sympathize with it; but we never gain that clear logical statement of its dialectic moments without which the ends of system are not attained.

Nowhere, however, is the lack of dialectic handling more perceptible than where the author proceeds to lay down the divisions of his subject. The truths of Theology presented in the Bible are on the one hand truths to be believed and so form the *Glaubenslehre* (Doctrine of Faith). On the other hand the same truths are the ground of duty, and from this point of view we get the *Pflichtenlehre* (Doctrine of Duties). Once more, since these truths become finally and fully efficacious only in fellowship between God and man, we have, as the third part of the system, the doctrine of the Kingdom of God. Of this division the first two parts are the *fides* and *observantia* of the old Dogmatic; but to the trilogy given by Ewald we can recall no closer analogy than the *quid credas, quid agas, quo tendas* of the Middle Ages. It is certain that the doctrine of the Kingdom of God was unduly neglected in the older systems. But was not the source of this neglect the too narrow conception of Christian Ethic as consisting exclusively of exposition of the moral law? The Kingdom of God is the Christian *Summum Bonum*, the highest moral idea, and so, one imagines, should precede and dominate the doctrine of duty. At any rate Ewald's division is not plainly convincing as it stands, and it is not too much to wish that instead of leaving its justification to the sequel, our author had offered some dialectical vindication of its completeness, instead of simply throwing it out as obviously adequate.

The first volume is not part of the system thus divided. It contains an introductory discussion on the doctrine of the Word of God, and in fact as Ewald puts it, sets before us the way in which the word of God as contained in the Bible appears among men. The whole volume is rich in thought and is, we think, both from its subject and its form better fitted to be popular and useful in an English translation than almost any other of Ewald's books. It would be injustice however to attempt to give within our brief limits any outline of discussions which obstinately refuse to be divided into heads. Some idea of the volume may perhaps be conveyed by saying that it is in great part a sort of *historico-psychology* of Revelation. (Comp. *Academy*, vol. ii., p. 535.)

The second volume* commences the system proper, and takes up the doctrine of God, as the first part of the *Glaubenslehre*. It is obvious that the whole work must extend to a considerable size. And it must be taken along with parts of the author's *History of Israel*. But for the discussions of the History of Biblical ideas in that book, Professor Ewald would have thought it necessary to append to the system a purely historical section.

The doctrine of God, which is to be followed by the doctrines of the Universe and of Man, is approached by a discussion of Spirit; for though a fixed notion of God was earlier developed than the notion of Spirit, the immediate knowledge of God's Being comes most clearly through the knowledge of what Spirit is, and the God of the Bible is in the very earliest times a God who is Spirit (not *a* Spirit). Spirit is that energy of unseen life behind the world of sense which man first learns to recognise on the analogy of his own psychical experience; and in this unseen region the one unchanging, all-creating, sanctifying Spirit of God appears in contrast to the ever varying, waxing, and decaying multiplicity of human Spirits.

The next great question is the personality of God—the fundamental truth of personal religion that He presents himself as *Thou* to *me*. The personal God of the Bible is not an arbitrary being—not even in Exodus xxxiii. 19. He is a wonder-worker, for he is infinite; but in all things is *one* and unchangeable, whether considered in his inner essence as Spirit, or in his outer essence (the *Way*) as Love.

Our author next passes on to the three main truths, that God is Spirit, Love, and One. Under the first head we have a historical survey of the battle fought by the doctrine that God is Spirit during the whole course of the Bible history. Then are enumerated the individual points in which God's Spirituality becomes significant to us. On the one hand God is Creator, Eternal, Unchangeable—on the other All-present, All-knowing, All-working. In this part of the work we would specially mention the discussion of Theophany, the remarks on the notion of Heaven as God's dwelling-place, and the exposition of the notion of a miracle.

Love, says Ewald, is the instinct of spirit to direct its inclination and force to a definite object. God then, who has no needs, acts from pure love. This leads to discussion of God as good and as Father. Next comes the subject of the outgoings of Love, from which is deduced the doctrine of God's Wrath and Jealousy. In this connexion we have an elaborate and important discussion of the addition to the Second Commandment, after which follow various considerations as to the relations of God's Righteousness, Wisdom, Longsuffering, &c. Finally God's eternal love gives rise to

his Faithfulness. But the most comprehensive name for all that belongs to this head is God's Holiness. The unity of God considered internally implies his Perfection, Loftiness, and Blessedness. On the other hand, God as one is also the only God and the true God. To these considerations is attached a most important essay on the world of Spirits—Angelology—and another on the names of God, which contains considerable additions of detail to what Ewald has formerly written on this head.

It has scarcely been possible for us to show how many points are touched in this volume. All remarks on detail must be reserved for a second paper, in which we propose to discuss some individual points of interest.

W. ROBERTSON SMITH.

Intelligence.

The new Commentary on Proverbs by Dr. Delitzsch is most elaborate and thorough, extending to upwards of 500 clearly printed pages, and saturated, as one might anticipate, with rabbinical and other learning. No difficulty is overlooked, or treated in a superficial or cursory manner. The exposition, also, is characterized by perfect fairness, and a sincere desire to elicit in each case the thought to which the sacred writer intended to give expression. Though very decidedly conservative, the author, as is known, does not hesitate to depart from traditional views, when he cannot honestly maintain them critically. Thus, he assigns the authorship of the first nine chapters, not to Solomon, but to an unknown writer of the age of Jehoshaphat. And he ventures occasionally to suggest or approve emendations of the traditional text, though not so often as would seem to be necessary. The faults of the Commentary are principally those of excess. Its value and usefulness would have been increased by abridgment. Many of the grammatical explanations might have been omitted. And the remarks as to the radical meaning of words are occasionally more curious than instructive. Thus, it does not help us to understand i. 13 and iii. 9, to be informed that etymologically *שָׁרָה* denotes "Schwerwiegende Habe die das Leben leicht macht," and *וְיָצַקְתָּ מִמֶּנּוּ* "fac Jovam gravem de levitate tua." The author, indeed, from his long familiarity with rabbinical writings, seems to have contracted not a little of the rabbinical spirit. But faults such as these do not detract materially from the value of a work which is otherwise calculated to be so useful to the student.

Mr. Elzas, whose handy edition of the Book of Job we noticed some time ago (*Academy*, vol. iii., p. 430), has brought out through Messrs. Trübner the first volume of a work on the Minor Prophets, executed on a similar plan. It will be found useful by less advanced students. The illustrative notes leave comparatively little to be wished, but the author's acquaintance with modern criticism is limited.

We have been favoured with the sight of an unpublished pamphlet of great interest to Biblical critics, by Bishop Colenso. It consists of three parts: i. The Age of the Elohist narrative in Genesis—a detailed answer to the essay of Dr. Kusters in the *Theologisch Tijdschrift*, to which reference has already been made in these pages; ii. A Comparison of the language of the Deuteronomist with that of Jeremiah; iii. The Age of the 68th Psalm—a fragment of part vii. of the Bishop's great work, which is now in the press. Prefixed are some brief answers to the criticisms of English reviews, including our own, from one of which we learn with interest that the Bishop has been convinced by Dr. Oort that the prophecy of Joel must be set (as a whole?) in the age of Zedekiah.

Contents of the Journals.

Vierteljahrsschrift für deutsch- und englisch-theologische Forschung (ed. Heidenheim), vol. iv. No. 3.—Assyrian Researches; by A. Scheuchzer, Conclusion, with lithograph. [Asiatic history in the light of the Egyptian monuments.]—The Samaritan chronicle of the High Priest Eleazar (11th cent.), and [Samaritan] Prayers of the High Priest Amram; by Editor. [The former from a Bodleian, the latter from a Vatican MS.]—No. 4.—Jewish interpretations of the Psalms; by Editor. [Extracts from the Midrash Tehillim, translated; chiefly valuable for the history of exegesis.]—Criticisms on the text of the Proverbs. [Valuable; should be read with Lagarde's *Anmerkungen zur griech. Uebersetzung*, Leipzig, 1863.]—The Christology of the Karaites [Containing a remarkable Karaite testimony to "Jesus of Nazareth, a great sage, a righteous and pious man," whose teaching is represented as opposed to that of his followers]; and A Samaritan Prayer [illustration of Samar. angelology and astrology]; by Editor.—Vol. v. Nos. 1 and 2.—Criticism of the text of the Epistle to the Romans, and The Christology of the Samaritans; by Editor. [The former, an attempt to show that our present text of Romans is probably a translation from the Aramaic, and not free from errors, e.g. in i. 17, 19, ii. 16, 20, iii. 31, iv. 13, v. 6, 7, vi. 23,

* The second volume contains a good deal of preliminary matter, in which the perhaps most interesting point is the defence of the attempt to find a single, consistent, though gradually developing, scheme of doctrine in Scripture.

xv. 28.]—On the most recent Syriac literature. [Notice of vol. i. of Zingerle's *Monumenta Syriaca*, and Mössinger's *Supplement* to Cureton's *Corpus Ignatianum*.]

Studien u. Kritiken, 1873, No. 4.—On Freewill; by W. Schmidt.—A new exposition of Matt. xi. 12; by F. F. Zyro.—On "the works of the law" in Romans and Galatians; by F. Märcker.—A letter of Maximilian II. to Melancthon; by T. Brieger.—Lagarde's *Prophetæ Chaldaice*; rev. by Klostermann.—Dietzsch's *Adam und Christus* (Rom. v. 12-21); rev. by F. Sieffert.—Martensen's *Christian Ethics*; rev. by J. Hamberger.

Theologisch Tijdschrift, Sept.—Grote on Aristotle; by Dr. van der Wijck. [An appreciative summary of the contents of Grote's great work.]—Critical contributions. &c.; by Dr. A. Kuenen, viii. Job and the suffering servant of Jahveh. [An answer to the arguments of Seinecke and Hoekstra for the identification of Job with the "Servant" of the "Second Isaiah," comp. *Academy*, vol. ii. p. 138.]—Literary survey:—Dr. Colenso's latest contributions to the criticism of the Pentateuch, the *Speaker's Commentary*, vol. iii., L. Geiger's *Commentatio, quid de Judaorum moribus atque institutis scriptoribus Romanis persuasum fuerit*; Anger's *Lectures on the Messianic idea*, noticed by Dr. Kuenen; Otto's *Corpus Apologetarum*, vol. ix., Lorgion's *Ecclesiastical History of the Netherlands*, Baehring's *Thomas von Kempen*, Douen's *L'Intolérance de Rhénan*, and other works, by Dr. Rauwenhoff.

New Publications.

BÖHL, E. Forschungen nach e. Volksbibel zur Zeit Jesu. Wien: Braumüller.

COLET, Dean. An Exposition of St. Paul's Ep. to the Romans, delivered as Lectures in the University of Oxford about the year 1497. Ed. J. H. Lupton, M.A. Bell & Daldy.

HAUSRATH, A. Neutestamentliche Zeitgeschichte. 3 Thl. Die Zeit der Märtyrer u. das nachapostol. Zeitalter. 1 Abth. Heidelberg: Bassermann.

KNEUCKER, J. J. Siloah. Quell, Teich und Thal in Jerusalem. Heidelberg: Groos.

MARTINEAU, J. Studies of Christianity. Longmans.

PROBST, F. Die kirchliche Disciplin in den drei ersten christl. Jahrhunderten. Tübingen: Laupp.

THENIUS, O. Die Bücher der Könige erklärt. 2 Aufl. Leipzig: Hirzel.

Physical Science.

A **General System of Botany**, descriptive and analytical. By Em. Le Maout and J. Decaisne. Translated by Mrs. Hooker. Rearranged with additions by J. D. Hooker, C.B., M.D. Longmans, Green, & Co., London.

Of the original authors of this remarkable book Le Maout is best known for his *Leçons élémentaires de Botanique*, which is an excellent example of clear and attractive exposition, while Decaisne has long held a chief place amongst living analytical botanists. It was in every way worthy of its distinguished authors. Taking into consideration the comprehensiveness of the plan, the moderate price (the English edition is two and a half times as costly), and the profusion of the illustrations, of which there are no less than 5,500, executed with all the characteristic excellences of French draughtsmanship, probably few scientific books have ever been published which there was more satisfaction in possessing. One especial merit is the comparatively large space given to the lower or Cryptogamic plants. Nothing is more striking in comparing the general plan of a book on systematic zoology with one on systematic botany than the disproportionate space which is usually occupied in the latter by the higher organisms to the exclusion of the lower. Here the apportionment is more equitable even if it is still far from adequate. There is no doubt a certain amount of apparent reasonableness in the fuller treatment which is always given to flowering as compared with flowerless plants. Everywhere the former dominate over the latter, and if they receive more than their due share of attention we may admit that they never fail to claim it. From the point of view however of the student of general biology every form of life requires a careful study, and the extent to which each is re-

presented in the field of nature does not concern him but only the systematist. The present work however is quite indispensable to all students of general biology, as none other at present existing, except perhaps Schnizlein's *Iconographia* which is more costly and far less convenient, contains anything like as much information about the different plans of organisation included in the vegetable kingdom.

Comparing the two editions, we find that the principal change in the English one is in the sequence of the orders of flowering plants. The original authors adopted that of Adrien de Jussieu, which has not, however, been much used. It places at the top of the series the *Monopetalae*, concluding with the highly consolidated *Compositae*. Amongst all systematists who admit the doctrine of descent this is accepted as their proper position in any arrangement based upon it. But no linear sequence can ever be properly adjusted to represent genetic affinities. The Candollean, which is adopted in the present edition, though no doubt in principle artificial, is very convenient for purposes of instruction, and inasmuch as a vast body of current botanical literature is adapted to it, no attempt should be made to discard it for purposes in which it is necessary to use some sequence, until to continue to do so actually stands in the way of scientific progress. Dr. Hooker does not see his way to improve on De Candolle's arrangement, "which places *Monopetalae* in the centre of the series, flanked on either side by *Polypetalae* and *Incompletæ*, which have many cross affinities, but have few affinities of any consequence with *Monopetalae*" (p. 994). Mr. Bentham and Dr. Hooker have also employed it in their *Genera Plantarum*, a work of enormous labour still in progress, and which will for a long future to come be regarded as a digest of modern Phanerogamic Botany. They have introduced into it, however, some modifications which are also employed in the present work. The most important of these is the intercalation between the manifestly perigynous and hypogynous orders of a new series, *Discifloræ*, characterized by a highly developed stamiferous disk. The object is to provide a receptacle for those orders, which it required some violence to group with either *Thalamifloræ* or *Calycifloræ*. If the use of such a structure as the disk for classificatory purposes is not without its difficulties, it must be remembered that it hardly claims any higher recommendation than that of expediency. Many orders are allowed to retain their full rank in the present work which in the *Genera* are reduced, but this, as is here pointed out, in a book of this kind is not without its advantage in allowing their distinctive morphological peculiarities to be more fully treated. It is interesting to get indications here of the views which will be ultimately adopted by the authors of the *Genera Plantarum* as to the position of the orders which the published portions of that work have not at present reached. Without going the length of Strasburger it may however perhaps be regretted that Gymnosperms are not definitely separated from angiospermous Phanerogams. With regard to the Monocotyledons, which have been very much neglected by systematists, Dr. Hooker has effected in this book a good deal towards a more rational settlement of their classification.

While a linear sequence is maintained at all it seems hardly worth while to attempt materially to adapt it to the theory of descent. Every such system must be of necessity more or less artificial, since it aims at expressing relations which are extremely complex in terms, if one may say so, of a single variable. It of course continually breaks down; a greater measure of success will reward any attempt to express these relations by employing some sort of chart; but their fullest expression would only be satisfied by the use of space of three dimensions. Dr. Hooker, in an extremely suggestive although very brief essay on classification given as part of an

appendix, compares the relations of some of the larger groups of plants to those of parti-coloured beads in a necklace which touch at similarly coloured points of their surface. "The position of each bead in the necklace is determined by the predominance of colours common to itself and those nearest to it." Robert Brown, whose labours chiefly consisted in the important work of determining the proper limits of Jussieu's orders, expressed himself as altogether indifferent about arranging these into a series, "*ipsa natura enim, corpora organica reticulatim potius quam catenatim connectens, talem vix agnoverit.*" (*Prodr. Flor. Nov. Holl.*, p. v.) Linnaeus was equally aware that a linear arrangement was insufficient. "*Plantae omnes utrinque affinitatem monstrant uti territorium in mappa geographica*" (*Phil. Bot.* 77). Such a map Giseke attempted to give in the *Praelectiones* which he published (1792) after Linnaeus' death. A diagram on the same principle constructed by Prof. Huxley for the animal kingdom may be seen in Spencer's *Principles of Biology*, i. 303. For plants, at any rate, this will be found probably to be both more convenient, and to involve less actual assumption than the "stammbaum" which is the delight of German Darwinians. In point of fact such a chart is an orthographic projection of the stammbaum not flattened out upon a page like a herbarium specimen, but fully expanded on all sides and seen as we may picture it in our imagination in a bird's eye view from above. In such a view of it, to quote from the address recently delivered by Mr. Bentham to the Linnaean Society: "We should have the present races represented by countless branches forming the flat topped summit of the Dicotyledonous tree—a hundred to a hundred and fifty thousand perhaps, if we take into account species only.....; the branches which immediately bore their present branchlets, as well as the lower more general ramifications, will have wholly disappeared from our view, or left only here or there the most fragmentary traces; and the surviving branches themselves will be most irregularly placed. Here we should see thousands crowded into compact patches definitely circumscribed at every point (*Compositae, Orchideae, Gramineae, &c.*); then we should meet with enormous gaps, either quite unoccupied or a few solitary branchlets or small clusters isolated in the middle (*Moringa, Aristolochia, Nepenthes, &c.*)" (*Proc. Linn. Soc.* 1872-3, xi.) To Professor Flower I think we also owe a striking interpretation of the meaning of such a chart. He conceives the genealogical tree not bounded by the periphery of the present, but stretching away its vigorous shoots into the unseen future. The horizon of to-day intersects limbs and branches and twigs, and the mutual relations of their intersections upon its plane may be represented upon a chart in a manner which allows everything which can certainly be determined as to genetic affinity to be expressed with the least possible amount of assumption. Charts for other horizons in the past might be constructed, down to that primordial one which intersects only the first stem of all. Twigs at one level which have been but just given off will leave their "trace" upon the intersecting plane close to that of the parent branch. In planes of a higher level these twigs will have diverged farther, increased in size, and become themselves centres about which the "traces" of another order of twigs are grouped. These groups will themselves fall into larger compound groups, the whole corresponding to the different grades of ramification of some great bough given off below. One set will represent orders, and these themselves will form aggregates such as Lindley endeavoured unsuccessfully to express by his "alliances." Mr. Bentham and Dr. Hooker have also attempted something in the direction of this integration, if one may call it so, of the vegetable kingdom by arranging the orders into "cohorts."

We are only at the present time beginning to obtain a clear view of the proper scientific position which the labours of systematists and methodizers are entitled to hold. Even Mr. Mill, who brought to his philosophical studies a competent knowledge at least of general botany, failed to attain a clear grasp of the rational ends of classificatory science. He defines the general problem of classification to consist in providing "that things shall be thought of in such groups and these groups in such an order as will best contribute to the remembrance and ascertainment of their laws." This is quite sufficient to include modern ideas of classification, but Mr. Mill takes a much more contracted view of the matter when he lays it down that, in studying objects for the sake of extending our knowledge of the whole of their properties and relations, we must consider as the most important attributes those which would most impress the attention of a spectator who knew all their properties but was not specially interested in any. Such an individual might be perfectly uninfluenced by particular scientific views of the value of diagnostic characters, but he would on the other hand be almost certain to seize upon those characters which a more extended study would show to be really of only superficial importance. He would no doubt, for example, sanction the group of Rhizanth in which the Balanophoraceae are associated with the Rafflesiaceae, an order with which, as Dr. Hooker has pointed out, they have no real affinity whatever. When Mr. Mill advocates the claims of a classification based upon differences in the internal integuments as obviating the absurdity of having to kill an animal to determine its species and genus, he ignores (although he admits that a natural classification must be founded in the main on internal structure) the true aims of classification. For a classification should be the expression of our most complete knowledge, and this cannot be hampered by considerations of absurdity. Mr. Mill does not comment upon the absurdity of having to destroy a flower—as he must often have done—in order to determine the true classificatory position of the plant to which it belongs, or of having to sacrifice part of a mineral in order to ascertain its nature. And though he sees clearly enough that the Linnaean classification by compelling us to think of plants in groups determined by unimportant characters has, by preventing our thinking of them in the connections which would be most suggestive, a mischievous effect upon our habits of thought, he does not allow himself to see that to think of animals in groups determined by integumentary characters is likely to be just as harmful.

The systematists who were antecedent to the influence of modern doctrines of descent were content to extricate from amidst relatively unimportant but often extremely confusing adaptive modifications the genuine points of resemblance in an organism which sufficed to fix its systematic position. Classificatory science was little more than an intellectual exercise which presented problems of no small difficulty but not without interest. So far it was an end in itself. At the most it registered the resemblances of living things and enabled general propositions to be framed about them. But as Mr. Darwin has hinted, it seems to have been sometimes in the minds of systematists that something more underlay our classification than mere resemblance. "I believe," he says, in his *Origin of Species*, "that something more is included, and that propinquity of descent—the only known cause of the similarity of organic beings—is the bond, hidden as it is by various degrees of modification, which is partially revealed to us by our classification" (4th edition, p. 489). This sentence marked a revolution in its study. And there was this advantage, that the new régime was able peacefully to enter into all the possessions of the old. For in proportion as resemblance in

organisms had been critically ascertained, their propinquity of descent had been ascertained also. Classificatory science had hitherto occupied itself with attempting to determine affinities by an analysis of characters from without. It now calls to its aid in unravelling the threads of the evolution of forms of life, the study of development which aids in determining affinities from within; and it checks its results—for with present knowledge it can hardly do more—by the facts of geographical and stratigraphical distribution.

It is only right to do justice to the difficulties which beset the labours of the early systematists. We are too apt to imperfectly appreciate their work, and to forget its continuity with our own. As Linnaeus observed, "videbant quidem veteres esse ordinem in natura qui consistit in rerum similitudine at similia combinare et dissimilia discernere non poterant." (*Praelect.* 2.) Tragus was the first (1560) to attempt any sort of botanical classification, and this was natural in its method. But the want of knowledge of the relative value of characters long stood in the way of both Tragus and his successors. Even as late as the close of the seventeenth century, a naturalist so philosophical as Ray was still blind to the utter absence of any classificatory significance in the herbaceous, fruticose, and arborescent habits of plants. He retained divisions founded upon them in his *Historia*, "et rompt ainsi," as Mirbel remarks "d'un trait de plume une multitude de rapports naturels." Linnaeus (and it is upon achievements of this kind that his true position as a naturalist depends) made an immense advance in determining the subordination of characters. This enabled him to group species into genera upon principles which to this day need little revision. But beyond this—to combine genera into larger groups or orders he found himself unequal. He saw by the intuition which is the possession of every great naturalist glimpses, but still nothing more than glimpses, of how it might be done. In the meantime he devised his artificial system, for which he claimed no higher value than that of utility. "Methodus artificialis sola valet in diagnosi." He thought that the time had not come for the maturation of a truly natural method. "Qui loco methodi naturalis disponunt plantas secundum ejus fragmenta respuuntque artificialem, videntur mihi iis similes qui commodam et fornicatam domum evertunt, inque ejus locum reaedificant aliam sed tectum fornicis conficere non valent" (*Gen. Plant.* ed. 6). But his great ambition was always to substitute a natural method for his artificial one, and his thoughts were occupied with the problem to the end of his life. "Diu et ego circa methodum naturalem invenienda laboravi, bene multa quae adderem obtinui, perficere non potui, continuaturus dum vixero" (*Classes Plantarum* 485). And it is remarkable that he had some insight into the true meaning of classification. His use of the word affinity was more than metaphorical; it actually implied something like genetic relationship. It is true that he formulated the well-known dictum "species tot numeramus quot diversae formae in principio sunt creatae." Nevertheless he believed that these species were genetically related to genera and orders, though not, it is true, in the way which is now accepted. Creation proceeded from the universal to the particular; orders gave birth to genera, and genera to species. "Supponendum plantas, quae ex ordinum miscela provenire id est genera ejusdem ordinis iterum inter se misceri; tunc oriuntur species" (*Praelect.* 18). To us this seems merely mystical and quaint, but nevertheless the essential fact which underlies it is that resemblance and genetic relationship linked themselves together in the mind of Linnaeus, though the age in which he lived was not ready for the full and complete apprehension of the causal connection of the two things.

It is impossible within the limits of this article to review the classification of Cryptogams from the point of view of

genetic relationship. There are grave difficulties in correlating the two series of vascular Cryptogams. It is difficult not to accept the passage pointed out by Hofmeister through *Selaginella* to Gymnosperms and perhaps thence to Phanerogams. But that from *Selaginella* in the opposite direction to Ferns is not so easy, though the interesting discovery by Fankhauser of the mode of reproduction of *Lycopodium* seems to bridge over the interval through *Ophioglossum*. This confirms the relationship which, as Berkeley remarks (*Outlines of Cryptogamic Botany*, p. 549), plainly exists between *Ophioglossaceae* and Clubmosses through *Rhizoglossum* and *Phylloglossum*.

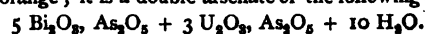
The biologist will one day reap the full result of the labour of the systematist. When all known plants are marshalled by their laboriously ascertained affinities, when the facts of distribution in time and space have given indications of how and where the tide of life has ebbed and flowed on the earth's surface with currents and waves of migrating forms, it will begin to be possible to see clearly the genetic relationship of all these forms and to trace back the streams of life to their common source. "To prove," says Dr. Hooker, "that affinities are genetic and real is one of the deepest problems of nature, the solution of which is to be arrived at through the patient labour of the anatomist and experimenter, which alone can reveal the philosophy of classification" (p. 994). W. T. THISELTON DYER.

Notes on Scientific Work.

Chemistry.

At the meeting of the *Association Française pour l'Avancement des Sciences* held last month at Lyons several papers of great chemical interest were read. M. Gautier described a new derivative of glucose, $C_{12}H_{22}O_{11}$ which he obtained by the action of hydrochloric acid gas at 0° on an alcoholic solution of the above body. After these substances have remained in contact at this temperature for twenty-four hours, the liquid is evaporated in vacuo, and the residue, after having been washed with ether, is treated with baryta and repeatedly crystallised from absolute alcohol. The new compound is a white, solid, deliquescent mass which cannot be fermented and reduces the copper solution. It is formed by the union of two molecules of glucose with elimination of water. It is not an ether of glucose, but probably of that class of derivatives from aldehydes to which Wurtz gives the name of aldol. The name of glycadane has been proposed for it by M. Gautier, that of aldane having been suggested by M. Riban to denote such compounds as furnish aldehydes when they undergo condensation and eliminate water. Glucose, according to M. Gautier, behaves more like an aldehyde than an alcohol. M. Wurtz considers that Gautier's discovery must throw light on the constitution of glucose and explain its double function of a pentatomic alcohol and an aldehyde.—M. Carnot announces the existence in Corrèze of native bismuth along with the oxide and sulphide. The most abundant mineral is the oxide containing about 70 per cent. of the metal. The latter is obtained by dissolving the ore in hydrochloric acid and then precipitating the bismuth with bars of iron. Closely associated with it are wulfenite, scheelite, and mispickel.—M. Friedel described some minerals rich in tellurium from Asia Minor. One species consists of a telluride of gold and silver, containing 21 per cent. of the former and 37 per cent. of the latter metal. Telluride of lead was also met with.—M. Grimaux has proposed for the glycerine, $C_3H_7O_3$, formed by the action of water on dibromhydrin the name of stycerine. It comports itself with formic acid like a polyatomic alcohol in setting carbonic acid free.

The New Saxon Uranium Minerals.—The remarkable group of uranium minerals, which were found in the Weisser Hirsch Mine at Schneeberg in 1871, were submitted to a very careful examination as regards their mineral characters by Prof. Weissbach, of Freiberg, and more recently have been analysed by Dr. Winkler, whose paper appears in the *Journal für Prakt. Chem.*, Band 7, Heft 1. Uranosphaerite occurs in brick-red hemispherical masses which decrepitate when heated and break up into acicular crystals with a silky lustre and brown colour. This mineral has the formula $Bi_2O_3, 2 U_2O_5 + 3 H_2O$. Wapurgine when heated to visible redness becomes of a brown colour which on cooling changes to orange; it is a double arsenate of the following constitution:



Trögerite has a yellow colour which changes by heat to a golden

brown and by cooling to a yellow differing somewhat from the original hue. That which has been heated breaks up when moistened with water into small lustrous plates, and a slight development of heat is observed. Its composition is $3 \text{U}_2\text{O}_3, \text{As}_2\text{O}_5 + 12 \text{H}_2\text{O}$. Zeunerite occurs in fine green pyramidal crystals, which bear a very great resemblance to torberite, and have the formula $\text{CuO}, 2 \text{U}_2\text{O}_3, \text{As}_2\text{O}_5 + 8 \text{H}_2\text{O}$, or that of torberite with the phosphoric acid replaced by arsenic acid. This discovery led the author to examine the beautiful and characteristic chalcocite of Redruth for arsenic acid, and he found more than three per cent. of that acid replacing phosphoric acid. It is interesting to note that at the Wolfgang Maassen Mine, distant about half an hour from the source of the zeunerite, copper uranite occurs which is free from arsenic. Uranospinite has a pale siskin-green colour, is met with only in very small amount, and has the composition $\text{CaO}, 2 \text{U}_2\text{O}_3, \text{As}_2\text{O}_5 + 8 \text{H}_2\text{O}$. The lime uranite of Falkenstein was next examined for arsenic acid and found to contain phosphoric acid only. The author in conclusion describes some experiments by which he succeeded in forming zeunerite and uranospinite artificially in crystalline plates.

The Determination of Nitrogen in Albuminoid Substances. A very laborious research has been conducted by Prof. J. Seegen and Dr. J. Nowak (*Pflüger's Archiv*, Band 7) on the surest method of estimating nitrogen in this class of organic bodies, and has led to very important results. They have made altogether nearly forty analyses of albumin, casein, gluten, fibrin, syntonin, legumin and desiccated meat of three kinds, by the two well-known methods, that of Will and Varrentrapp (with and without the use of sugar) and that of Dumas. To avoid the common error of too high a number in the latter process resulting from an imperfect expulsion of the air, they pass carbonic acid for several hours through the combustion tube before heat is applied. They found in every case that combustion with soda-lime gives a lower number than that obtained when the substance under examination is burnt with copper oxide and the volume of nitrogen measured. The discrepancy between the numbers given by the two methods is not the same for each albuminoid substance analysed. It is greatest in the case of albumen, where it amounts to 3.4—3.5 per cent., or more than 20 per cent. of the entire nitrogen, and is least in that of fibrin, where it is 0.7—1.1 per cent. In the analyses of most of the above-mentioned bodies the difference in the number given by the two processes was about 1.5 per cent. or 10 per cent. of the total nitrogen. In the results of the analyses of the meat specimens the disparity amounted to 1.7—2.6 per cent. A considerable portion then of the nitrogen of these substances is not expelled in the form of ammonia by burning with soda-lime. That the use of sugar assists the development of ammonia and consequently raises the analytical percentage has long been known. The authors find that a moderate addition of sugar causes no material increase, and that a quantity at least ten times that of the substance under examination has to be taken to give a number at all approximating to the right one, while twelve to sixteen times the amount of sugar still gives a number short of that obtained by Dumas' method of analysis.

Triferrous Phosphide.—This compound has been prepared by R. Schenk (*Jour. Chem. Soc.*, August and September, 1873, 826) by the action of phosphoretted hydrogen on ferrous sulphate. It is a black magnetic powder which dissolves slowly in acids, either concentrated or dilute, with evolution of phosphoretted hydrogen and hydrogen. When freshly prepared and dry it ignites below 100° . Analysis gave numbers which accord with the formula Fe_3P_2 . It is interesting to trace as regards its power of resisting the action of acid a resemblance between this compound and the metallic phosphides of meteorites.

Jeypoorite.—A paper by Major Ross on a mineral of this name, from the Khetree copper mines of Jeypoor, in Rajpootana, has been communicated to the Royal Society by Prof. W. H. Miller, the Foreign Secretary, and appears in the *Proceedings*, vol. xxi., No. 144. Twice in this paper Major Ross states that the mineral contains 82 per cent. of oxide of cobalt and curiously enough he twice also tells us that it contains 82 per cent. of cobalt as metal. He gives moreover a complete percentage analysis of the mineral, in which he estimates the whole of each of the three constituent metals to be combined with oxygen, yet there is present, over and above the oxygen, 5 per cent. of sulphur which it is difficult to believe could likewise be in combination with any one of them. He describes this mineral as "a Sulph-antimonial Arsenide of cobalt," a name which signifies a compound of sulphide of cobalt with sulphides of antimony and arsenic, although according to his own analysis Jeypoorite contains altogether over twenty per cent. of oxygen. It will not a little astonish any mineralogist who may peruse this paper to find that these crystals described as "metallic" contain more than one-fifth their weight of oxygen.

The current number of *Silliman's Journal* contains a translation of Prof. vom Rath's obituary notice of Gustav Rose.

Geology.

The Ancient Glacier of the Aubrac Mountains, Lozère, France.—M. G. Fabre communicates to the French Academy of Sciences (*Comptes Rendus* vol. 77, p. 495), a note on the existence in the quaternary epoch of a great glacier in the Aubrac Mountains, Lozère,

France. These mountains constitute an extensive slightly undulating granitic plateau with a mean height of 1,200 metres; Mounts Dore, Cantal, and Lozère, upon which traces of ancient glaciers had been already observed, attaining an altitude of over 1,700 metres. The Aubracs are drained on the north side by the river Bès, the lower part of the basin of which forms a large cirque. All the low granitic plateaus of the communes of Marchastel, Nashedals, and Recoules d'Aubrac are covered with an unbroken sheet of hardened argillaceous mud enclosing striated and polished blocks of basalt. This is the *moraine profonde* of the great Bès glacier. Between Nashedals and the bridge of Recoules, the parish road traverses a very thick deposit of moraine matter entirely hiding the subjacent granite. Near the hamlet of Congoussac are two blocks of basalt, each more than two metres in diameter, perched upon the summit of a *moutonnée* boss of granite. These blocks accompanied by a multitude of basaltic pebbles, more or less angular and often striated, form part of a long train of erratics extending from Gramon to Escudières. All the basalt was detached and brought from the Peyrou mountain, a distance of 26 kilometres. The departmental road is cut through the right lateral moraine for a distance of four kilometres, and exhibits the basaltic and granitic pebbles enclosed in a hard grey argillaceous mud from five to six metres in thickness. At the time of its greatest extension the Bès glacier sent off a branch to the valley of Sinières. One of the lateral moraines of this branch has been exposed for a length of 1,200 metres, and the terminal moraine forms at Moulins de Sinières a barrier across the valley 20 metres in height. This glacier affords additional evidence of the universality of the great phenomena of the quaternary epoch.

The Trachytes of Hungary and Transylvania.—Dr. C. Doelter, who has recently visited Tokay and Eperies, gives in a letter to Prof. G. Leonhard (*Neues Jahrbuch für Mineralogie*, 1873, part iv., 397) a sketch of his examination of the augite and hornblende andesites which break through the rhyolites of that district. The augite andesite, which is extensively distributed through the Hungarian and Transylvanian trachytes, is here compact, and of a black colour, the ground-mass being often glassy like pitchstone. The felspar is in a fine state of division and only to be recognised with the naked eye in weathered specimens. Under the microscope augite is seen to be a constant constituent, hornblende being either entirely wanting or very sparsely distributed. This rock in a decomposed condition constitutes the matrix of the precious opal at Czerventza, and of the common opal at Telkibanya. The hornblende andesites are not so widely distributed. They are mostly compact, with a black ground-mass, small yellowish crystals of felspar and greenish-black hornblende being visible on weathered surfaces, while under the microscope a little augite is sometimes to be discerned. Near Tokay a rock consisting of plagioclase, hornblende, and quartz occurs, which however does not in any way resemble the quartz-trachytes or dacites of Transylvania. A quartz-bearing augite-andesite, hitherto unknown either in Hungary or Transylvania, is also met with here. Northward of Eperies a hornblende-andesite is found containing crystals of a brownish-red garnet. The sanidine-oligoclase-trachyte of Zirkel and Roth pass into the sanidine trachyte here and therefore form no special division. Doelter is of opinion that it is unwise to attempt to classify these rocks until they have received a more extended mineralogical and chemical investigation.

The Volcano at Climbach near Giessen.—After a careful survey of the Aspenkippel, at Climbach, near Giessen, Dr. A. Streng and K. Zöppritz have arrived at the conclusion that it is a true volcano which was in full activity towards the close of the tertiary period. It lies on the western border of the basalt sheet which spreads from the Vogelsgebirge to the Lahn valley, and probably contributed to this great outflow. The basalt directly overlies the oligocene and miocene in places. The basalt of the vicinity of Climbach is represented by tuffs and slaggy breccias, and the former are covered with a well defined deposit characterised by the presence of fragments of basalt and layers of dysodile, probably of quaternary origin. The basalt is dark blue or black and encloses small crystals of olivine and augite. Under the microscope it is seen to consist of a very fine ground-mass enclosing large clear crystals of unaltered olivine, a granular aggregate of this mineral, crystals of a plagioclase felspar and augite, while some colourless portions appear to be filled with an amorphous or vitreous material. A vesicular basalt of a brownish or clear grey colour, much decomposed, is met with on the south side of the crater, the slaggy breccia being found in large masses on the east side. The latter consists of fragments of basalt and Bunter sandstone cemented together by the tuff, and sometimes enclosing an amorphous brown mineral in appearance like palagonite, analysis however showed it to be more nearly related to bole. The basaltic tuffs are distinctly bedded and lie in a horizontal position. They consist of fragments of basalt, both compact and porous, Bunter sandstone, and quartz, accompanied by some crystals of hornblende and augite, the whole being cemented together by a palagonitic material. To judge from the few sections seen the basalt rests immediately on tertiary limestone, and is succeeded by the basaltic tuff and slaggy breccia. (*Jahresbericht d. Oberhessischen Gesellschaft für Natur und Heilkunde*, 14, 30.)

The Structure of Obsidian.—In a letter which appears in the *Jahrbuch für Mineralogie*, 1873, part iv., 394, A. Kennigott describes the characters of some obsidians from Iceland. Thin sections exhibit numerous spherical cavities, and occasionally very small brownish-black opaque spherules, which are surrounded by a number of small acicular brownish-black crystals about equal in length to half the diameter of the spherules, from which they appear to radiate. In one section the spherules are arranged in a straight line without the usual acicular crystals, and each exhibits an opaque black nucleus surrounded by a brown transparent and relatively thick crust. Near the spherules in the same section are some peculiar groups of acicular black crystals, which for their whole length and on both sides are covered with short black needles lying parallel to each other, and making with the parent crystal an angle of about 60°. There are moreover a few oval or occasionally cylindrical structures which are likewise surrounded by numerous long colourless needle-like crystals. Similar needles occur in isolated groups without any nucleus and crossing each other at every possible angle. These groups constitute the bulk of the minute white specks distributed through the obsidian; those seen by the naked eye have an irregular outline and are clear and pale-blue under crossed Nicols like the sanidine plates in the black obsidian from Ararat. Colourless crystals of orthoclase, lengthened in the direction of the vertical axis, are also present.

Botany.

Origin of European Tertiary Flora.—Lesquereux in the third report of the United States Survey of Montana concludes that the European Tertiary flora partly originated from Arctic North America. He gives the following summary of his views:—1st. The Tertiary flora of N. America is by its types intimately related to the Cretaceous flora of the same country. 2nd. All the essential types of our present arborescent flora are already marked in the Cretaceous of our continent, and become more distinct and more numerous in the Tertiary; therefore the origin of our actual flora is like its facies, truly N. American. 3rd. Some types of the North American Tertiary and Cretaceous flora appear in the same formations of Greenland, Spitzbergen, and Iceland; the derivation of these types is therefore apparently from the Arctic regions. 4th. The relation of the North American Tertiary flora with that of the same formation of Europe is marked only for N. American types, but does not exist at all for those which are not represented in the living flora of this continent. Therefore the European Tertiary flora partly originated from N. American types, either directly from our continent or derived from the Arctic regions. 5th. The relation of the Tertiary flora of Greenland and Spitzbergen with ours indicates, at the Tertiary and Cretaceous epochs, land connection of the northern islands with our continent. 6th. The species of plants common to the Cretaceous and Tertiary formation of the Arctic regions and of our continent indicate, in the mean temperature influencing geographical distribution of vegetation, a difference in + equal to about 5° of latitude for the Tertiary and Cretaceous epochs. 7th. The same kind of observations on the geographical distribution of vegetable species shows at the Tertiary and Cretaceous times a difference of temperature according to latitude, analogous to what is indicated at our time by the characters of the southern and northern vegetation.

Floral Symmetry of Cruciferae.—The reduction of the flowers of the Cruciferae to a symmetrical type has repeatedly engaged the attention of morphologists. Moquin Tandon regarded the four long stamens as representing a pair which had been multiplied by a dédoublement. Mr. Bentham, who is the only British botanist who possesses the rare accomplishment of a familiarity with the Russian language, points out in his recent address that Meschaeff (*Bull. Soc. Imp. Nat. Mosc.*) has pushed the explanation of Moquin Tandon to its furthest limits by regarding the four petals as also the result of a dédoublement of a single pair, thus reducing the whole flower to a dimerous symmetry, the different whorls decussating with each other.

Distribution of Pollen and Spores in Air.—Mr. Blackly, in a book entitled *Experimental Researches on Hay Fever*, has been incidentally led into an investigation of the amount of pollen present in the air. He began with that of a meadow at the average breathing level (four feet nine inches from the ground). Mr. Blackly's results are not without their interest as showing what an active agent the wind must be in effecting cross-fertilization. The observations were commenced in April and continued till the end of July. A slip of glass was exposed horizontally coated with a thin layer of a non-drying liquid. He tabulates the daily results; and the highest number of pollen grains obtained on a surface of a square centimetre in twenty-four hours was 880 on June 28. Sudden diminutions in the quantity of pollen—when these occurred in the ascending scale between May 28 and June 28—were invariably due to a fall of rain, or to this and a fall in the temperature. Mr. Blackly then proceeded to examine the amount of pollen to be found in the higher strata of the atmosphere. This was done by means of a kite which by being attached to other kites sometimes attained an elevation of 1000 feet. The pollen was found to be much more largely present at the

upper levels than at the "breathing level." Taking the average of the quantities where pollen was present at both levels, he found that whilst the average for the ordinary level was 24 only, for each experiment, that for the higher levels was 472.33, or more than nineteen times as much. After making due allowance for the difference in the velocity of the air at various altitudes, there still remains a great preponderance unaccounted for in the amount of pollen in the upper strata. Mr. Blackly remarks that his experiments also afforded abundant proof of the presence of fungoid spores in the air in large quantities. In one experiment which lasted four hours, and in which the number of pollen grains collected at an altitude of 1000 feet was over 1200, the spores of a cryptogam probably *Ustilago segetum* were so numerous that he could not count them. At a rough estimate they could not be less than 30-40,000 to the square inch. A fact like this makes the ubiquity of fungoid organisms a thing easy to comprehend.

That these organized contents of air travel to a considerable distance was proved by a series of experiments made in the outskirts of Manchester, but within the boundary of one of the most densely populated parts, and in no direction within less than one third of a mile of grass land. The quantity of pollen was only about one tenth of that collected in the country.

Physiology.

The following are brief summaries of the most important papers read in the Department of Anatomy and Physiology at the Bradford Meeting of the British Association. Prof. Ferrier, of King's College, London, gave an account of the results he has obtained by direct stimulation of various parts of the surface of the brain by Faradic electricity. The animals used for experiment (while under the influence of chloroform) were the cat, dog, jackal, monkey, rabbit, &c. The general effect of irritation of the surface was to produce muscular movements, and these could be predicted by Dr. Ferrier with almost complete certainty. The experiments have now been witnessed by judges sufficiently numerous and competent to place their accuracy beyond doubt, though of course they need extension and interpretation in many directions. It also remains to be explained how it was that earlier experimenters obtained negative results from irritation of the cerebral convolutions, and that even Fritsch, though he to some extent anticipated Dr. Ferrier in similar observations on the effect of galvanism, failed to obtain any movements with the interrupted current. The most important results in the inquiry as yet obtained seem to be: 1. That the areas of surface physiologically distinct are remarkably small, sometimes not above the third of an inch in diameter, so that it needs great care to confine the action of the electrodes to a single one. 2. That several regions when stimulated produce no (motor) phenomena: and this is particularly the case with the anterior part of the frontal lobes, which is probably peculiar to man and monkeys. 3. That the movements produced affect several muscles in groups, and that their contractions are so correlated as to cause the performance of definite operations, such as screaming, mewling, or barking, stretching out the hand for prehension, drawing up the lips and opening the mouth for fighting, pricking the ears and turning the head for listening, and so on. 4. That, speaking generally, stimulation of the upper frontal convolutions affects the facial muscles, of the parts behind and below those of the fore limb, further back, the hind limb, while the cerebellum appears to affect the ocular muscles. 5. That the movements are crossed, with one or two exceptions, the explanation of which confirms the rule. 6. That the supposed seats of emotion indicated by these experiments do not at all agree with those empirically laid down in the once popular system of so-called Phrenology.

A second important paper was by Prof. Burdon Sanderson, of the "Brown Institution," in the University of London, who has found that the movements of Venus's fly-trap produce electrical variations corresponding with those long known in muscle which give rise to the condition of electrotonus.

A third communication was from Dr. McKendrick and Mr. Dewar of Edinburgh, who have succeeded in shewing that the stimulus of light on the retina produces electric variation in the optic nerve. This result, which has been long suspected and was rendered more than probable by Du Bois Reymond, has now been placed on a surer basis, and the objections which might naturally arise from interference of muscular currents, from the action of heat, etc., appear to have been all satisfactorily met. But perhaps the most interesting part of the inquiry is that the results are in complete correspondence with those which would follow from the application of Fechner's celebrated law, deduced as is well known by mathematical processes and now confirmed by the results of direct experiment.

Joseph Barclay Pentland, who died in July last at the age of seventy-five, laboured hard in the field of scientific discovery, as a geologist and geographer. Sent, in 1827, as secretary to the Consul of Peru, and afterwards appointed Consul-general to Bolivia, he availed himself of the opportunities his position afforded him of surveying these elevated regions. He measured the peaks of the Peruvian Cordillera of the

Andes, and was the first to ascertain that Chimborazo was not the highest summit of the Western hemisphere, but must yield in elevation to Sorata and Illimani, mountains of the eastern Cordillera of Peru. Mr. Pentland also took an elaborate survey of the great lake of Titicaca, whose borders were the ancient seat of Peruvian civilisation; his map was published by the Admiralty, but he never could be induced to write the history of his travels.

The intimate friend of Cuvier, Humboldt, Arago, and Elie de Beaumont, Mr. Pentland passed much of his life in Paris. His winters he spent in Rome and he edited the Handbooks of Italy and Rome, for his friend Mr. Murray, the publisher.

New Publications.

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- CLAUSIUS, R. Ueber einen neuen mechanischen Satz in Bezug auf Stationäre Bewegungen. Bonn: Georgi.
- COMBES, J. L. Note sur l'origine et la formation des minéraux de fer du Haut-Agenais (Lot-et-Garonne) et des phosphates de chaux de Quercy. Agen: Noubel.
- DARBOUX, M. G. Sur une classe remarquable de courbes et de surfaces algébriques et sur la théorie des imaginaires. Paris: Gauthier-Villars.
- DOELTER, C. Ueber das Muttergestein der böhmischen Pyropen. Wien: Gerold's Sohn.
- HAMPE, E. Flora Hercynica, oder Aufzählung der im Harzgebiete wildwachsenden Gefäßpflanzen. Halle: Schwelschke.
- KOCH, L. Uebersichtliche Darstellung der europäischen Chernetiden (Pseudoscorpione). Nürnberg.
- LORING, Hon. G. B. Speech on the Museum of Comparative Zoology, in Senate, March 26th, 1873. Boston.
- MAREY, E. J. La machine animale. Paris: Baillière.
- MEEHAN, T. On the Agency of Insects in Obstructing Evolution. Philadelphia.
- NOUËL, M. E. Les plantes de la guerre. Note sur les plantes étrangères observées aux environs de Vendôme à la suite de la guerre de 1870-1871. Vendôme: Lemercier.
- PACKARD, A. S. Catalogue of the Pyralidae of California, with descriptions of new Californian Pterophidae. Salem (Mass.).
- PACKARD, A. S. Synopsis of the Thysanura of Essex County, Mass., with Descriptions of a few Extralimital Forms. Salem (Mass.).
- PLAUCHON, J. E., et LICHENSTEIN, J. Le Phylloxera (de 1854 à 1873). Résumé pratique et scientifique. Montpellier: Coulet.
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Philology.

Modern Greek Miscellany. [Νεοελληνικά Ἀνάλεκτα, περιοδικὸς ἐκδιδόμενος ὑπὸ τοῦ Φιλολογικοῦ Συλλόγου "Παρνασσού." Τόμος Α'. Ἐκ' Ἀθήναις 1870-72.]

THE Philological Society Παρνασσός at Athens has established a claim to the gratitude of all students of modern Greek literature by the publication of their excellent Νεοελληνικά Ἀνάλεκτα, the first volume of which is now ready before us. It contains the most authentic and unalloyed records and documents of the national life of the Greek nation in its present phase: we receive here Greek fairy-tales in the original text (which adds not a little to their charm), a new collection of popular songs and amorous distichs, a very original one of enigmas and riddles, a series of treatises on points of Greek superstition and usages, and lastly a glossary of the Lesbian dialect annotated by Dr. M. Deffner, a young

German scholar who seems to have fixed his abode at Athens after having completed his studies at Leipzig under G. Curtius and Ritschl. The ἐπιλογὴ added to his notes on the glossary is highly instructive (though consisting for the most part of a mere application of sound philological method to the study of modern Greek, which, as Dr. Deffner justly observes, has hitherto been more studied by amateurs than by trained scholars), and in many parts continues and supplies the same writer's *Neograeca*, a treatise published in the fourth volume of G. Curtius' *Studien*. It would have been more convenient if Dr. Deffner had referred to the paging of his *Neograeca* in Curtius' collection instead of quoting a separate paging of his own; we have found it very troublesome always to verify his citations. The general tendency of the whole volume is to trace the Greece of old in the modern country, but to do so in a manner at once upright and convincing by producing the people such as they are, in habits, usages, and speech. We agree, however, with Dr. Deffner that the popular speech of the modern Greeks is the strongest evidence in favour of their descent, and that it will be difficult to uphold much longer the well-nigh antiquated theory of a complete extirpation of the Hellenic race, in the face of such linguistic facts as are being gradually collected by the industry of scholars. We would draw attention to the observations of Dr. Deffner in which he endeavours to show that the unalloyed speech of the people—that speech which the blind Atticists of our day despise and the λόγιοι attempt to supersede by a cold and artificial dialect—contains formations evidently older than the Attic dialect itself. In reading such evidence we were reminded of the words of the late Prof. Mavrophyrides in his excellent History of the Greek Language, p. 23: Ἰκανὰ ἔπαθεν ἡ γλῶσσα ἐκ τοῦ ἄκρου ζήλου τῶν ἐπὶ οὐκ αἰὶνῶν ἀπτικιστῶν ὅς μὴ τὴν ἀσχημίσουν περισσότερον νεοὶ σπαραγμοί. The present Greek language is not, in fact, the daughter, but rather the younger sister of ancient Greek, and why should it lose all its characteristic peculiarities, those very features which declare it to be the νεωτέρα φάσις τοῦ ἑλληνισμοῦ (Mavrophr. p. 30), and submit again to the lifeless and extinct forms of Attic grammar? But to return to the work before us: little as the compilers of this volume aim at any dogmatism, we think that a single fairy-tale in its naive freshness is more attractive than an elaborate and polished composition in the literary dialect, and are grateful to the Society for making these documents of national speech accessible to us. A feature frequently met with in these tales is the fondness for riddles and clever sayings, which appears also so conspicuously in the later period of the ancient Greek literature, e.g. in the history of Apollonius of Tyre. We are aware that much material may be added to the notes of the editors on these tales, and many evident analogies of these Greek tales with those of other nations have been overlooked by them. A fox eating grapes is known to us from the well-known Aesopean fable, but it is surprising to find this phenomenon of natural history as the representative of our old friend Puss in Boots, as we do in the tale entitled ὁ ἀφέντης ὁ Τριορρωγῆς (p. 14-16), "The gentleman of the three grapes." The termination of this tale is remarkable for its ingenuity. The last word of it was at first unintelligible to us: τὸν ἀποταύφχιασε, but we subsequently found it explained in a note on another tale, p. 33, as ἐλέγχω ἐρησῖα τινὰ πράξαντα κακόν τι, yet the derivation appears to be obscure: at least we cannot believe that this expression comes from ἀποκύπτω. The word ἀκαμάτης which is explained in the Lesbian glossary, p. 387, occurs in the same tale, p. 14, and perhaps it would have been useful to refer to this, inasmuch as it shows that the word is not confined to the dialect of Lesbos. Altogether it would be easy to collect linguistic peculiarities from these tales and poems. We find

τὸ βίος "res familiaris," p. 16, for the neuter use of which we may compare τὸ πλοῦτος in the language of the New Testament and in modern Greek, and the ancient Greek ὁ and τὸ σκότος. We read ἀξάγκωνα p. 121, and ἀξυπόλυτος p. 27, 152, 189, both being evidence of the preposition ἀξ, of which we hope to speak at a future time in the *Academy*. The form ἀχ occurs in a popular song, p. 70 : μὴν ἀχ τὰ χιόνια τὰ πολλὰ, μὴνα κι ἀπ' τὸ χαλάζι where we may easily suspect that ἀπ' ought also to be ἀχ. The adj. θώρατος is explained πελώριος p. 17 : but as it stands no doubt instead of θώρατος (cf. p. 47, 53), we should rather think that it means "visendus" = ἀξιοθεός in Alciphron. The form μηνᾶ which is so frequent in mediæval compositions (= μηνύει), occurs p. 133, 253. In his note on the Lesbian meaning of ἔργον (= βαμβακερὸν νῆμα), Dr. Deffner ought to have mentioned the modern ὑργαλειὸν "spinning wheel." We agree with the same scholar in rejecting the explanation of the mysterious initial ν in νοικοκυρά, νύπνος, νῶμος as a digamma (p. 412, cf. 457), but we cannot suggest another explanation. For the word νινί "baby" (p. 413) we would compare the well-known English *ninny*, the Italian *ninno*, and believe that there was a Greek word νενός = μωρός. It is common to use τὸ μωρό μου in the sense of "my little one." We are also glad to see that Dr. Deffner rejects Koraës' derivation of ῥίχνω "I throw" from ῥήγνυμι (K. of course also proposes to write ῥήχνω) : in a paper printed in the *Trans. of the Phil. Soc. in London*, 1867, the present writer had endeavoured to establish ῥίχνω and ῥίπτω as parallel forms of the same root. But ῥήχνος, 458, is direct from ῥήγνυμι—and therefore a later derivation than βραχύνω, which clearly comes from the earlier form of the root, ῥαγνυμι. Dr. Deffner says : ἡ ἀλλαγὴ τοῦ α εἰς η δὲν εἶναι σπάνιον τι εἰς τὴν ἰων ῥιάν., but he does not prove α = η. We would finally draw attention to the peculiar and rare use of τοῖς as an acc. (corresponding to ταῖς as acc. in the first decl.) in a proverb p. 181 :

οἱ πολλοὶ δὲν εἰν' καλοί,
μόν' σὰν τοῖς ἔχης 'ς τὸ φαί.

At present I can quote only one other instance of this form from a popular song edited by Legrand in No. 12 of his Collection (see his Preface p. 5 sq.). We will end with the question whether μπαίνω (411) = ὁ ὀργῶν καὶ νεώτατος ταῦρος may be traced to μπαίνω in the sense of ἐπιβαίνω.

We refrain from producing more details, but once more recommend this interesting volume to all students of modern Greek. If we may venture to offer some advice to the Society, we would counsel them in future to employ greater care in revising their proofs—only the last number (edited by Deffner) is tolerably free from errors of the press.

W. WAGNER.

The Complaynt of Scotland, A.D. 1549 ; with an Appendix of four contemporary English Tracts ; re-edited from the originals with Introduction and Glossary by J. A. H. Murray. (Early English Text Society.) Triibner and Co.

PERHAPS the reader of Scott's *Lord of the Isles* may recall to memory the lines—

"Quenched is his lamp of varied lore,
That loved the light of song to pour :—
A distant and a deadly shore
Has Leyden's cold remains."

Such is the fitting epitaph upon the poetically-minded and studious author of *Macphail of Colonsay*, and the *Mermaid of Corrievreckin*, whose early death at Java was so sincerely lamented. Amongst other things, we are indebted to Dr. John Leyden for the edition of the *Complaynt of Scotland* published in 1801, copies of which are very scarce, as only 150 were printed. To Mr. Murray we are now indebted for a reprint of this, corrected in a few necessary

instances by help of the originals in the British Museum. We cannot help congratulating the reader upon the fortunate circumstance that the duty of reprinting and re-editing has fallen into such excellent hands ; for Mr. Murray's careful introduction and glossary leave nothing to be desired. He has done well to incorporate the remarks of Dr. Leyden in his own account, wherever those remarks seemed in any way worth preserving.

It is not very clear who was the author of this curious book. It has been attributed to Sir James Inglis, Sir David Lyndesay, and to one Wedderburn. Respecting the first name, Mr. David Laing has discovered two owners of it. One of these was abbot of Culross, and was murdered in 1531, eighteen years before the *Complaynt* appeared ; so that the author clearly was not he. But there was another Sir James Inglis who, from about 1508 to 1550, was chaplain of the Abbey of Cambuskyneth, and, though he must have been upwards of sixty years old in 1549, his claim is more difficult to disprove. The internal evidence shows conclusively that it is not Sir David Lyndesay's. But in the Harleian Catalogue the book is twice set down as "Wedderburne's Complaynte of Scotland," and, though there is nothing to show what authority there was for the assertion, we agree with Mr. Murray that it is very likely to be correct, as the name Wedderburn is of frequent occurrence, and there seems to be no reason why it should have been mentioned in so explicit a manner unless the compiler of the Catalogue had some good reason for it ; in the shape, probably, of a note now lost. However, we quote Mr. Murray's opinion on the subject. "The only things," he says, "I consider certain as to the author are (1) that he was a distinct and thorough partisan of the French side ; (2) that he was a churchman, still attached to the Catholic faith ; (3) that he was a native of the Southern, not improbably of the Border, counties. Sir David Lyndesay is peremptorily excluded from consideration ; no less so, I think, is Wedderburn, vicar of Dundee ; in lack of further evidence, the claims of Sir James Inglis of Cumbuskenneth, and of some unknown priest of the name of Wedderburn, are equally balanced, though, if the part of Mackenzie's Life which calls Inglis a Fife man belongs to this Inglis, the evidence of dialect would be against him." Like Mr. Murray, we incline to the "Wedderburn" theory ; chiefly, perhaps, because there is nothing against it, and one small piece of positive evidence in its favour.

In discussing the language of the work, Mr. Murray, himself the author of a book on the Dialect of the Southern Counties of Scotland, is particularly at home and trustworthy. It is a great comfort to find him leaving alone all petty squabbling about a Scottish as distinct from an English language, and boldly stating the broad fact that, before the year 1450 at any rate, the language of Lowland Scotland was originally identical with that of England north of the Humber. Until this fact be clearly perceived and thoroughly accepted, we shall never gain any clear ideas on the subject. Whether we give to the old language of the whole district between the Forth and Humber the name of old Lowland-Scotch or of old Northumbrian is a matter of very secondary importance, and a mere question of convenience, so long as it is seen to be all one. We are not discussing a question of nationality, but of philology ; and it is only because old Northumbrian is the more convenient term that we incline to the use of it. And it is more convenient, because we are already familiarised with the notion of including Lothian in Northumbria, but not with the notion of including Yorkshire in Scotland. One thing has considerably tended to darken the matter ; and that is, the very changeable way in which the word *Scottish* has been applied ;

the meaning of the word at one date is not the same as its meaning at another. In fact, in this point as in all others where philology is concerned, chronology has to be much considered. If, indeed, there be a study which, in English philology at least, has been completely ignored, it is that to which we would give the name of the Chronology of Etymology. We trust our readers will make a note of this; for we make bold to say that if, henceforth, the *Chronology of Etymology* could be once admitted as a *leading and necessary* principle of English etymology, one half of the false derivations would speedily go by the board. It has been dimly recognised by most of our best students; but, by those who have only a limited knowledge of etymology, and who are, on that account, constantly suggesting new derivations which they cannot *themselves* perceive to be absurd, it has always been, and will continue to be, persistently ignored. It is not enough to suggest that such a word or phrase might be derived from such another word or phrase; it is also required that the word said to be the original is truly the older form, and that the change in spelling is such as, in accordance with the known history of the language, may reasonably have taken place. An example will perhaps place this in a clearer light. There is a provincial word *chare*, which in Newcastle means a narrow street or by-way; it is identical with the Wiltshire *chore*, which means a narrow passage between two houses, and with the Midland form *chure*, meaning a passage, by-way, or turning out of a larger road. Now there is nothing absurd in deriving this from the A.S. *cerre*, flexus, viæ deflexio, diverticulum, anfractus, as Lye explains it, because we know that the verb *cerran*, to turn, with the variable spelling *cyrran*, was used in England before *chare* was; and that the change of *c* into *ch* satisfies the Chronology of Etymology. We have a like instance in what is, possibly, the same word in another sense, viz. the word *chare*, a turn of work, certainly derived from A.S. *cerran*, and preserved in *char-woman*. But our point is, not that we assert this derivation to be the right one, for it is still a little uncertain, but that it is a possible one; since it satisfies—if we may be excused for repeating the phrase—the Chronology of Etymology as well as the History of the Language. Yet when, not long ago, the Midland word *chure*, a passage, was proposed for etymological solution in *Notes and Queries*, what happened? Immediately two writers came forward with the positive reply, that it was clearly the German word *thür*, a door! But what wild work is here! How do we know that, chronologically, the German *thür* ever existed in England before *chure*? Indeed, we may ask what proof is there that High German was ever spoken, in olden times, in the Midland Counties? If an Englishman knew what a *door* was, why should he trouble himself to pronounce it *chure*? It is time to put aside such puerilities as these; we must no longer be misled by mere similarity of sound, but we must satisfy all the requirements of chronology and history. Little as we know of the exact history of all the successive changes in our language, surely we know enough to avoid such odd blunders as this. But such is English "etymology" in 1873.

This digression has been suggested by the sound ideas which Mr. Murray holds regarding "Scottish," and merely with the view of more forcibly showing the necessity of attending to dates. The language of the *Complaynt* belongs to the "Middle-Scotch" period, and is classed with that of the works of Bellenden, Gawain Douglas, and Lyndesay. Mr. Murray's statement respecting the apparent locality of it is very interesting. He says: "While I cannot read ten lines of Lyndesay without having it forced upon me, as a native of Roxburghshire, that his form of Scotch is not mine, I have everywhere found the language of the *Com-*

playnt familiar as the tones of childhood, and ever and anon have been surprised at the sanction which it gives to forms or idioms which I had thought to be modern vulgarisms of the local patois, but which are thus shown to have a pedigree of three and a half centuries to plead." We may therefore put down the work as an example of the Roxburghshire variety of the Middle-Scotch period. Let us beware, also, of too hastily assuming that provincial words, however vulgar, are of modern formation. We must not omit to notice the great number of French words which abound throughout the work, owing to the intimate connection in that age between France and Scotland.

The object of the work was to issue a strong appeal or "exhortation" to the three estates of the realm, the nobility, spirituality, and commons, in order to awaken them to a consideration of the gravity of their position; in the hope that they might be induced to forego their civil bickerings and debates, to cultivate unanimity amongst themselves, and to make common cause against England. The most interesting point is, that something like a more satisfactory state of things seems to have come about nearly at this time; due, no doubt, as Mr. Murray says, to the treaty between England and France made in 1550; one result of which was that the author, feeling somewhat more satisfied in his mind and less anxious to confine himself solely to matters political, went so far as to add to his work a very curious chapter (in fact the one by which it is best known) which he entitles "Ane Monolog of the Actor," or, as it may be called, "A Monologue Recreative of the Author;" see pp. 37-68. This is certainly a very singular production. He describes how, being weary, he walked abroad in the fields till sunset on a certain 6th of June, continued walking about all night, and then beheld the daybreak. Then comes his famous description of dawn, how beasts and birds of every sort began to make peculiar noises, each after its kind. "The bullis began to bullir, quhen the sheep began to blait, be cause the calfs began till mo, quhen the doggis berkit." And so it goes on at some length, telling us the right names for all the various animal sounds. Thus we find that the ass roared, the hens cackled, the cocks crew, the chickens "pewed," the glade (kite) whistled, the geese cried "clack," the goslings "quhilk," and ducks "quack." The cranes "crooped," the crows said "warrok! warrok!" the swans mourned, the turtles greeted, the cushat yowled, the dove "crooded her sad song that sounded like sorrow" (no bad alliteration), the swallow jargled, and the jay jangled. The lapwings cried "thieves neck!" whilst the pies clattered. The sparrow cheeped, the ousel yelped, the goldfinch chanted, the red-shank cried "my foot! my foot!" and the ox-eye tomtit cried "twit!" The herons gave a wild screech as if the kiln had been on fire. Then the author went down to the sea-shore, where, gazing across the flood, he saw a galliasse appointed for war. He then describes at length the weighing of the anchor and the unfurling of the sails, specifying all the cries used by the mariners during the operations. Then the guns are got ready for action; the order given being—"Gunners, come here and stand by your artillery, every gunner to his own quarter. Make ready your cannons, your culverin 'moyens,' culverin bastards, falcons, sakers, half-sakers, half-falcons, slangs and half-slangs and quarter-slangs, head-sticks, murderers, passe-volans, berches, dogs, double berches, hackbuts 'of croche,' half-hacks, culverins, and hail shot. And ye, soldiars and companions of war, make ready your cross-bows, hand-bows, fire-spears, hail-shot, lances, pikes, halbards, rondels, two-handed swords and targes." Then follow the noises made by the various pieces of artillery. Then the author returns to the fields, sees some shepherds, and describes all that

they had for breakfast. He next lectures them on the excellence of a pastoral life, quoting all manner of examples, from King David to Amphion, and from Abraham to Paris, son of Priam. Next he gives a small treatise on astronomy, explaining the primum mobile, the meridian, the colures, &c., carefully proving the existence of antipodes. He goes on with the planets, the comets, and meteorology. After this, he cites the names of all kinds of tales and romances, the Canterbury Tales, the Wallace, the Bruce, Arthur, Bevis, Pyramus and Thisbe, and many more; next, of numerous songs, as "King William's Note" and the "Hunts of Cheviot;" next, of dances, as "the hunt's up," the lamb's-wind, the shake-leg, the shake-a-trot; next, of flowers, as "barba aaron," water-lily, hemp, celandine, &c., &c.; after which he expresses himself as "beand contentit of that pleysand nychtis recreatione," as well he might be. It will of course be understood that we have modernised the spelling considerably; it is singular that the present work is far harder to read than the older Northumbrian of Barbour.

The Appendix contains (1) the Just Declaration of Henry VIII., A.D. 1542; (2) the Exhortation of James Harrysone, Scottishsheman, 1547; (3) the Epistle of the Lord Protector Somerset, 1548; and (4) the Epitome of Nicholas Bodrugan, alias Adams, 1548. These all help to illustrate the main part of the work. The Glossarial Index "aims at registering all the words which differ in spelling or usage from modern English;" and occupies forty pages. Such indices are very valuable; it is only by compiling a considerable number of them, to be afterwards combined, that we can lay the foundation of a good General English Dictionary.

WALTER W. SKEAT.

PROFESSORIAL DISSERTATIONS OF UNIVERSITY COLLEGE, LONDON.

IN *Professorial Dissertations for 1872-3* (University College, London) Mr. Henry Malden has given us a thoughtful, and indeed exhaustive discussion on a long-disputed question, the number of the chorus in the *Eumenides* of Aeschylus. His conclusion is a very reasonable one, that in the prologue, in which the Furies appear upon the stage in the shrine of the Pythian temple, they are there rather as actors than as a chorus, and only three in number. The limitation of the Furies to three was probably, as he says, somewhat later than the mythology with which Aeschylus was familiar: but he also rightly observes that "three was a favourite number in the definite forms of mythology" ("in later times," he need not have added; the Gorgons as well as the Phorciads were three, *Prom. Vinc.* 795-8). It is very probable, and it removes several scenic difficulties to assume, that three principal Furies first appear in the action, and are reinforced, as it were, by twelve more, when they unite in a general chorus. Mr. Malden ingeniously cites *Choeph.* 1057 (Dind.),

ἀναξ' Ἀπολλων, αἰδε πλεθύνουσι δὴ,

where he considers the version I had given of πλεθύνουσι, "they swarm," less correct than "they get more in number." He supposes that Orestes sees only three at first, and then the larger number appear—crop up, as it were—one after the other. In support of his view he might have cited *Eum.* 589,

ἐν μὲν τὸδ' ἦδη τῶν τριῶν παλαιωμάτων,

the point of which would be (besides the well-known allusion to the "three throws" in wrestling), that one of the three accusing goddesses has already gained her victory decisively.

A good service would be rendered to the history of ancient thought by any one who would investigate the causes why the mystic *Three* has exercised such extraordinary influence in all the mythologies and religions of the world from Homer downwards, where the Triad of Gods is distinctly enunciated (*Il.* xv. 187). Even the triple-leaved shamrock survives to this day, as the fleur-de-lis so long prevailed in heraldry, as an emblem of the mystic number.

In the trial scene, Mr. Malden thinks it not unlikely that the three chief Furies ascended to the stage to appear as accusers before the Areopagus, leaving a chorus of twelve on the orchestra. He is probably right. This ascent (*ἀναβαίνειν*) from the orchestra to the stage by stairs was certainly adopted in Comedy (e.g. *Ar. Ach.* 732; *Equit.* 149; *Pax* 427, and perhaps *Vesp.* 1342); and there is no reason why the licence should have been withheld from Tragedy.

Mr. Malden, in giving his opinion that the eccycema was used for exhibiting the interior of the temple of Delphi to the spectators, has

omitted to notice that this is expressly stated by the scholiast (quoted on v. 64 of my edition), and also that the same scholiast on 585 (Dind.) gives the number of the chorus as 15 (ὡς γὰρ ἦσαν).

With regard to the size of the stage in the great theatre at Athens, Mr. Malden thinks, with A. W. Schlegel, that it was small, and could hardly hold eighteen persons. Yet it seems certain that in the *Agamemnon* the King enters the stage on a mule-car with Cassandra by his side, and doubtless a body of attendants. In the *Achæniens* (156) a sufficient number of persons appear to be called ὁδομάτων στρατός,—and that they do really appear, and even show fight to some purpose with Dicaeopolis, is clear from the context.

Nor is it at all certain that either in the *Choephore* or the *Persians* the tomb (tumulus) of Agamemnon or Darius was represented by the θυμέλη in the orchestra. To make the prologue spoken by the πρωταγωνιστής in the orchestra is, I conceive, a view neither necessary nor consistent with tragic usage; and I think that both in the *Choephore* and the *Electra* of Sophocles the tomb was actually on the stage. This is confirmed by the scene in the *Pax* of Aristophanes, which (if I have rightly explained it in my preface to that play, p. xii.) requires a heap of stones, under which the goddess is supposed to be buried, to be on the stage itself, and also a number of workmen who are engaged with ropes and mattocks in removing them to another part of the stage (v. 361, τοῖ τοὺς λίθους ἀφελόμενοι). If so, it is impossible that the stage could have been very small, though the λογέων, or front part of it for the actors when speaking, may have been so.

I doubt whether Mr. Malden has seen the very interesting and beautiful vase-painting that forms the frontispiece to my third edition of Aeschylus. There *two* furies only are represented in the temple of Delphi, there being, in fact, no room in the group for a third. But the evidence of this drawing, as far as it goes, is decidedly in Mr. Malden's favour.

Mr. R. Ellis has a dissertation, replete with learning and wide research, on some difficult passages of that most obscure of Roman poets, Propertius. In iii. 18, 35 (ii. 26, 35 as he gives it after the old editors), the MS. reading *cum ratis Argo* is defended against the emendation (such it probably is in ed. Ven. 1488) *cum rudis Argus Dux erat*, &c. Mr. Ellis takes *Argo* as the dative of *Argus*, the builder of the ship, and translates, "When the dove, launched on a strange sea, served Argus as the guide of his ship." And there seems no valid objection that can be raised against this view. He thinks the mistake arose from the wrong notion that *Argo* meant the ship itself, and therefore required some change in the case.

The legends of the Argonauts were, as he says, very various, and poets by no means agree as to localities. In its origin, I cannot doubt that it represented the voyage of some early adventurers in search of the sun-lands, if not of the sun itself, in the far east. This representation of the sun by a golden fleece or a phosphoric garment is well known in mythology; and Medea as the granddaughter of Helios fully confirms the view. In a voyage altogether mythical it is vain to identify localities—a remark that applies equally to the wanderings of Io in the *Pro-metheus* and of Ulysses in the *Odyssey*. It does not therefore, as Mr. Ellis says, "surprise us if we find Propertius using a wholly different account of the passage of the Symplegades from that of Apollonius."

A much more difficult passage is in iv. (iii. Barth.) 7, 21 seqq., where the "Argynni poena" is rendered very obscure by the corruption of the end of the verse into "minantis aquae." The reading adopted by most editors, "Athamantiadae," though at first sight a plausible conjecture, seemed to me so unrhymical that I preferred in my edition to retain the vulgate marked with an *obelus*. Mr. Ellis now suggests

Quae notat Argynni poena, Mimantis aquae,

and also, but with less confidence,

Qua notat Argynni poena Mimantis aquas.

But his translation is certainly somewhat forced, "shores signalized by the punishment of Argynnus, the waters of Mimas that drowned him." *Mimantis aquae*, he says, is a nominative in apposition with *poena*. As for the locality, he admits that in the ordinary mythology it was placed in Boeotia, on the banks of the Cephissus. But, as the poet mentions the Carpathian sea as the scene of the wreck by which Paetus was drowned, he supposes him to have transferred it to the coast of Asia Minor, and he rather ingeniously suggests that the islands Argennusae may record the story of Argynnus as a local legend. (More probably, I should say, the word is a corruption of *ἀργυροῖσσαι*, "white islands.") Here however is the stormy headland Mimas; and Mr. Ellis cites Thuc. viii. 34 in proof of its known danger.

It may be doubted if Propertius is rightly called "a learned man" (p. 24). He was so only in the sense that he was a pedant in Greek learning. His ignorance of geography is very often shown; and like Virgil's knowledge of farming, he got what he knew only from books, and often mixed up different accounts in one and the same story.

The last passage discussed by Mr. Ellis is v. 51, 21.

Si te Eoa Dorozantum juvat aurea ripa, where he rejects the easy and probable correction *Doryxenium*, as the familiar name (Ὠκεορύσιμα) of a mistress, and supposes Propertius to

have used a semi-barbarous Latin form to express Dorakta or 'Oḡpakra, off the coast of Carmania (Persian Gulf), and that *aurea ripa* is an attempt to express the same word. This may or may not have been the case. For my own part, I think he had heard of an *Aurea Chersonesus* in the far east, and knew neither where nor what it was. This is one of those many passages in which we cannot hope ever to get beyond vague conjecture.

These Professorial Essays are indications of real work and much energy in the cause of learning. Like the *Cambridge Journal of Philology*, the occasional publication of them affords at once scope and encouragement for scholars to put their thoughts on paper. We are beginning, we may hope, if late, yet not wholly without effect, to follow the example so long set us by the Germans.

F. A. PALEY.

Intelligence.

Mr. George Smith has just discovered the fragments of an Ancient Assyrian Canon, from the Babylonian copy of which the much-contested Canon of Berosus was unquestionably derived. The importance of this relic to Chronologists can scarcely be over-estimated, and it will form the substance of a paper shortly to be read before the Society of Biblical Archaeology by its fortunate discoverer.

The Congress of German Philologists, which was to have taken place at the end of September in Innsbruck, has been postponed till next year on account of the cholera.

Dr. Beke's projected expedition for the verification of the true Mount Sinai, says the *Athenaeum*, is now assuming a practical form. Several gentlemen have kindly promised contributions, provided the whole amount required, estimated at £500, be forthcoming. It will be remembered that Dr. Beke is of opinion that "the Mount of God in Horeb" is not anywhere within the peninsula between the Gulfs of Suez and Akaba, but in the Arabian desert east of the head of the latter gulf. His views are more fully developed in a recently published pamphlet, *Mount Sinai a Volcano*.

We have received part i. of Mr. Dunbar Heath's new work *Phœnician Inscriptions* (Quaritch). It is difficult to treat such an eccentric publication seriously. Mr. Heath has a strong antipathy to the square Hebrew character, and the practice of writing it from right to left, which constitutes, in his opinion, "an immense bar to the popularisation of Semitic research." As if, forsooth, "Semitic research" needed to be "popularised." He has also several new, or partly-new, theories to ventilate touching the origin of Christian ideas, which we need not inflict upon the reader, as they are based for the most part on a philology of the wildest description. For a specimen of the latter, take the "obvious," "or at least probable" derivation of "Ashter or Gash-teret from a common root with *yašrēp*, uterus, *šarēpa*, &c." The inscriptions (among which the Moabitish of Mesha is included) are well known with the exception of four "devotee inscriptions" derived from the so-called "Moabite pottery," the genuineness of which is, to say the least, extremely problematical. They are all printed on Mr. Heath's new plan—from left to right.

Society of Heb. Literature.—The first publication issued under the auspices of this Society is entitled a *Miscellany of Hebrew Literature*, and contains, a specimen of the Biur on Genesis (*Bemisch*); specimen of the book Cusari (*Neubauer*); Zunz on the sufferings of the Jews in the Middle Ages (*A. Löwy*); Letter of Maimonides to Rabbi Jehudah Ibn Tibbon (*Jdler*); Chisdai the son of Isaac, translated from the German by A. J. K. D. under the direction of Dr. S. Davidson; &c., &c. The subject-matter of the extracts is interesting as far as it goes, but there is a fragmentariness about the publication which is only justifiable in an introductory specimen-volume like the present. It is to be hoped that in future the Society will give their attention to complete works, such as their *Commentary on Isaiah*, which will be reviewed shortly in the *Academy*. It may be remarked in passing that the *Miscellany* shews occasional signs of haste: *Chamdu lillahi* is written (p. 7) without *el*; there are some slight misprints in the Arabic of pp. 64-7; for "single chapter" (p. 70) read *verse*; the rendering at the commencement of p. 53 is inaccurate and contradictory; on p. 57 we read, that "the giving of the names rested upon the distinction between the species, which differ from each other like seals (each bearing a different engraving), as explained before," where we should read simply that the giving of names is a "separation of species and distinction of their powers." Is it implied (p. 26) that the saying: "From Moses to Moses, &c." refers primarily to Mendelssohn?

But, not to enlarge upon details, we may say generally that the work will prove a useful addition to the student's library, and is well suited as an introduction to the more solid works which, it is to be hoped, will speedily follow.

Contents of the Journals.

Zeitsch. d. deutschen morgenl. Gesellschaft, vol. xxvii. Nos. 1 and 2.—On the Paddhati of Cārgadhara; by T. Aufrecht.—Excursions into the region of the history of chess; by K. Himly.—Seventh

Athenian Phœnician inscription; by J. Gildemeister.—On forgeries of inscriptions; by A. Socin; with postscript by K. Schlottmann.—The shrine-bearing statue of Harual; by G. Ebers.—Explanation of Vendidad i.; by E. Sachau.—Massorah among the Syrians; Some recent discoveries in Syriac literature; and The grammatical book *Sekel Tobh*; by A. Geiger.—From letters of Dr. Socin and Dr. Goldgiher to Prof. Fleischer.—Further notes on the dual in Hebrew; by G. M. Redslob.—Reviews of Strack's *Prolegomena critica* (Dillmann); Abbeles' and Lamy's *Barhebraei Chronicon* (Zingerle); *The Pandit* (Weber); Wright's *Catalogue of Syriac MSS.*, part iii (Nödeke); Abu'l-Walid's *Book of Hebrew roots*, fasc. 1 (Geiger); al-Maqqari's *Book of the shining torch* (Mehren); Baer's *Liber Jussae* (Mühlau); Tiesenhansen's *Coins of the Oriental Caliphate* (Blau); Haug's and West's *Book of Arda Viray* (Hübischmann).

New Publications.

CORPUS inscriptionum latinarum. Vol. vii. *Inscriptiones Britanniae Latinae*, ed. A. Hübner. Berlin: Reimer.
CREUSAT, J. B. *Essai de dictionnaire français-kabyle (zouana)*, précédé des éléments de cette langue. Alger: Jourdan.
HAGIOGRAPHIA chaldaica. Ed. P. de Lagarde. Leipzig: Teubner.
HELTEN, W. L. VAN. *Ueber die Wurzel lu im Germanischen*. Leipzig: Richter und Harrassowitz.
JACOT. *Geograph. Wörterbuch aus d. Hndehn.* auf Kosten der d. morg. Ges. hrsg. v. Ferd. Wüstenfeld. 5 Bd. Amnkg. Leipzig: Brockhaus, in Comm.
JELLINEK, A. *Bet ha-Midrash. Sammlung aus der älteren jüdischen Literatur*. 5 Thl. Wien: Winter.
OGLERIUS, B. de T. *Opera quae sapersunt ad orthographiam Ms. codicis bibl. regii taurinensis athenaei nunc primum descripta ac notis declarata, cura et studio J. B. Adriani cum praefatio Jos. Raviola. Augustae Taurinorum: ex officina Regia.*
PAUTHIER, G. *Le livre classique des trois caractères de Wang Pêh-Héon en chinois et en français*. Paris: Challamel aîné.
SALLMANN, C. *Die deutsche Mundart in Estland*. Cassel: Kay.
STEIGER, K. *Die verschiedenen Gestaltungen der Siegfriedsage in der germanischen Literatur*. Hersfeld: Höhl.
STUDIEN zur griechischen u. lateinischen Grammatik. Hrsg. v. G. Curtius. 6 Bd. 1 Hft. Leipzig: Hirzel.
TARGUM, das samaritan. zum Pentateuch. Zum erstenmale in hebr. Quadratschrift, nebst einem Anhang textkrit. Inhaltes, hrsgb. v. Dr. A. Brüll. 1 Thl. Genesis.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 81.

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General Literature.

Voltaire et la Société Française au XVIII^e Siècle. 5^{me} Série. Voltaire aux Délices. Par Gustave Desnoiresterres. Paris : Didier. 1873.

M. DESNOIRESTERRES' last volume, like all its predecessors, contains the fruits of so much research so pleasantly arranged that it is scarcely reasonable to complain of the dimensions which the work is assuming. It may be said that no one can pretend to understand Voltaire who has not the patience to follow the story of his life, crowded as it is with an inconceivable number of trivial incidents, passing relationships, and the incessantly varying results of his restless activity, and that therefore in a work of any detail abridgment would amount to misrepresentation by making its subject appear less versatile and *remuant* than the fact. But though the matter of the work would not easily admit of compression, the author's style is rather too leisurely for a biography promising to fill seven or eight large volumes ; we do not ask to be spared the narrative of one of Voltaire's domestic explosions, literary combats, mystifications, intrigues, reconciliations, or the like ; or a single description, by friend or foe, of his person, his character, his hospitality, his fashion of life at Cirey, at the *Délices*, or at Ferney : but when the author comments intelligently and appropriately on each fresh incident as if it were the first of its kind, his involuntary repetitions tend to become tedious from no worse fault than their number.

This volume begins in 1753, when, after his rupture with Frederick, the poet was seriously at a loss to know in what territory he would be allowed to pitch his tent in peace. France was practically closed against him, for "la permission de voyager," which he spoke of with ironical gratitude as having been accorded him by the king his master, was certainly one of those permissions which are meant and understood as commands ; Stanislaus was given to understand that his presence in Lorraine would be unfavourably regarded, and his first attempts at making a final settlement in Switzerland were baffled by laws against the possession of land in the pays de Vaud by a papist, *un papiste comme Voltaire*, adds M. Desnoiresterres. This difficulty being happily overcome, the poet was able to indulge his favourite amusements, building, planting, beautifying, and, before long, directing a private theatre, at which point his puri-

tanical hosts felt bound, in the interests of the morality of Geneva, to interfere with his proceedings. The controversy between Rousseau and D'Alembert on the influence of the drama, which grew out of this dispute, and was interwoven with that between Rousseau and Voltaire himself on the subject of his poem on the earthquake of Lisbon (Nov., 1755), is the most noteworthy episode in the present volume. In *Le Désastre de Lisbonne* the subject makes the poem, and the poet was for once too much in earnest to be rhetorical ; the spectacle of Voltaire really in doubt—not confidently demolishing his neighbour's faith, but, for once, sincerely bewildered, without a remedy to suggest, and reduced to give helpless, and therefore hopeless, expression to simple grief and compassion—was naturally less striking to contemporaries, many of whom shared more or less in his feelings of the moment, than it is now, as the one disinterestedly impassioned utterance of the humane rationalism of the century ;—disinterested because Voltaire's eloquence could not rebuild Lisbon nor ward off similar catastrophes in the future, whereas his zeal against persecution or oppression in church or state was always *ad hominem* ; if he did well to be angry, it was because some benevolent purpose might be served by his wrath. There were no real pessimists in the eighteenth century (except perhaps Swift) ; there seldom are in an age pre-occupied with the points in which it differs for the better from its predecessors ; and the difference between Voltaire and Rousseau about the best possible world did not therefore go much below the surface ; they were agreed that this *ought* to be the best of worlds, and the only question was whether there was a sense in which it might be called so already, and if not, who was to blame for its imperfections. Rousseau argued that if there were no towns, they couldn't be swallowed up by earthquakes ; Voltaire, that if there were no earthquakes, people might build towns without risk of being swallowed up ; and the conclusions of both were more irrefragable than practical or consoling ; at any rate we have no reason to doubt the sincerity of Voltaire's reluctant concession to something not unlike orthodoxy in the present poem ; he objects to Leibnitz and Pope :—

"Quand la mort met le comble aux maux que j'ai soufferts,
Le beau soulagement d'être mangé des vers !"

but the possibility of consolation is a fixed postulate with

all, and the very strength of his conviction that this is not the best of all possible worlds inclines him to believe in a *Deus ex machina* bound by profession to make it so.

It was about three years after the exchange of polite but rather cool letters on this subject that D'Alembert's article on Geneva in the *Encyclopædia*—which contained a protest against the illiberalism of not allowing Voltaire to amuse himself and educate the Genevese by having his own plays acted in public—elicited amongst other protests, Rousseau's Letter of a Citizen of Geneva against the Stage; which, while marking, as Mr. Morley observes, Rousseau's definite schism from the philosophic congregation, was most especially and conspicuously an attack upon Voltaire. In this case, as in most of those in which we find the two great names of the literary revolution opposed to each other, the difference was partly a matter of principle and partly of character. All the traditional objections to the immorality or the immoral tendency of stage plays which are eloquently rehearsed by the citizen of Geneva apply with equal force, as they often have been applied since, to the realistic novel of sentiment; but it was not exactly an accident that while Voltaire was nearly as much in earnest about the lofty mission of the theatre as Goethe, Rousseau, whose glowing appeals to the social passions were themselves written in solitude, preferred to work upon his readers one by one, instead of collectively on an audience. One method is not of course more moral in itself than the other, but the effect of the romance was apt to be more deep and lasting and therefore the more practical of the two, since it influenced the conduct through the character. The drama, on the other hand, generally flourishes most triumphantly in a period just preceding great practical and intellectual movements. The superabundant vitality, which has not exactly decided upon the material channels into which it will be poured, expends itself upon the creations of objective art, with little or no direct didactic result, though the ready perceptions and versatile sympathies of a theatre-going generation certainly make action easier to their more serious successors. But to account for the extreme seriousness with which Goethe and Voltaire, who had so little else in common, both believed in the mission of the stage, and both positively delighted in superintending dramatic representations of their own or other works, we may suppose that they found in this most creative of the arts a substitute for, and perhaps a foreshadowing of, the really creative or reforming action of the generation following their own. To feel *with* others is an indispensable preliminary to feeling *for* them, as this again to any wide schemes for acting for or with them. But the drama in which great artists find it possible to believe is always of the classical, ideal sort, representing heroic emotions which it is desirable to feel rather than those which are common amongst contemporaries; in France, even during Voltaire's life, we see how, as practical interests became more absorbing and practical reforms more possible, realism takes possession of the stage, beginning with satire as with Beaumarchais and *Les Philosophes*, and ending as the merely trivial amusement which Rousseau denounced—rather prematurely while there were still audiences capable of dissolving in tears over Madame Denis's *Zaire*.

Voltaire certainly needed all the consolation his theatre could give him, for his intervention in public affairs was seldom as successful as it deserved. With his usual inventive generosity, on hearing of the court-martial on Admiral Byng, he wrote to the Maréchal de Richelieu for a letter, which should do all that the testimony of an enemy could in his favour, and forwarded it to the Admiral to use at his trial; it is this magnificent sense of being concerned in

every injustice in Europe which there was the most remote chance of his being able to arrest that makes the dictatorship of opinion which he really exercised seem too little for his powers and deserts. He was less happy in inventing machines of war, and the French army did not lose much by the neglect of his suggestion to send armed Assyrian chariots against the Prussians. M. Desnoiresterres gives a very good account of the unsuccessful negotiations for peace in which Voltaire's mediation was accepted, since his neutral position saved the French court from being compromised, and into which he threw himself with much zeal; we do not easily think of Voltaire as a statesman, but at a time when the Abbé de Bernis was chief minister the state could certainly not lose by employing his services. The draft of a treaty which he drew up has been lost, but some of his diplomatic notes are a charming amalgamation of business, philosophy, and couplets. After quoting some of Frederick's own verses, to put him in a good humour, he writes in one letter, "Votre majesté m'avait dit souvent que les peuples de Westphalie étaient des sots. En vérité, sire, vous êtes bien bon de régner sur ces gens là. Je crois vous proposer un très-bon marché en vous priant de les donner à qui les voudra." It would be impossible to put a disagreeable suggestion more attractively.

In 1760 Voltaire was consoled for the death of Maupertuis, his old enemy and convenient butt, by the infatuation of his successor at the Academy, Le Franc de Pompignan, whose *discours de réception* was a long, vehement, and unprovoked attack upon the philosophers. Le Franc was one of the men who having by accident become more famous than they deserve, can only hope to retain a nominal celebrity by not reminding the public of its original mistake; he had the misfortune instead to take his own greatness seriously; he wished to be tutor to the *Enfants de France*, he provoked Voltaire, and perished miserably under a slow fire of exquisite epigrams, unpitied even by the orthodoxy he had vindicated or by his patron the Dauphin, who was heard to quote from Voltaire's *Sur la Vanité* the last line, which comes after a passage of fine satiric commonplaces on the ephemeral glories of empire,

"César n'a point d'asile où son ombre repose;
Et l'ami Pompignan pense être quelque chose!"

It is he who is made to say:—

"Pour trouver bons mes vers il faut faire une loi;
Et de ce même pas je vais parler au roi,"

and of his own *Cantiques sacrés*:—

"Sacrés ils sont, car personne n'y touche."

Besides being massacred in verse, seven pages of Voltaire's most biting prose appeared anonymously under the title *Les Quand*, and was so much the rage that the Abbé Morellet decided the unfortunate victim must be made to *passer par les particules*; fairly laughed out of Paris, under a shower of *les Si*, *les Pourquoi*, *les Car*, *les Que*, *les Pour*, &c., he retreated to le Pompignan, where he died in 1784 without having dared to re-appear at the Academy. It is significant that the phrase "to have the courage of one's opinions" should be of French origin; the courage of acting upon the opinions they have has never been rare amongst Parisians, but the courage of *having* opinions, especially opinions that may be laughed at, is so uncommon as to be singled out for proverbial encomium; the desertion of poor Le Franc de Pompignan by the large class that was really of his way of thinking is a melancholy example of its absence. By comparison one is almost compelled to admire Fréron (whose account of the first representation of *L'Ecossoise* ends this volume), for the heroic pertinacity with which he continued to make jokes when the laughers

were all against him, and to protest in the *Année littéraire* that he was still alive and critical (rather like Nicolai in his later years), when according to every rule and precedent he ought to have been annihilated. The attacks on Gresset are less justifiable, but as the leader of a very militant church Voltaire might perhaps be excused for believing that those who were not with him were against him; this feeling, without such actual jealousy as M. Desnoiresterres supposes, would be enough to account for what seems cold and grudging in his recognition of the merits of really great men like Montesquieu and Buffon.

EDITH SIMCOX.

Le monde slave, voyages et littérature, par Louis Leger. Paris: Didier. 1873.

M. LEGER's little book is exceedingly clear and well written, its author having assumed, and no doubt rightly, great confusion of thought on the part of the French reading public with regard to his subject. At the same time it is perhaps not hypercritical to observe that the title is a little too ambitious. Only two chapters treat of the Slav world in general—the introduction, containing a sketch of the various members of the Slav family and the attempts hitherto made to popularize the knowledge of them in France, and an essay at the end of the book on *les origines du panslavisme*. This last essay is perhaps the most interesting in the book. It enumerates the various testimonies of a sense of their common origin and kinship which are to be found in the literatures of the different Slav peoples before the beginning of the present century. Of the nine remaining chapters three treat of impressions of travel among the South Slavs and in Bohemia. A sketch of the career of Bishop Strossmayer, the modern "Maecenas" of Croatia, and the literary history of the South Slavs occupy two more. The author uses his personal observations to modify and to some extent correct the pessimism of the Moscow professor, whose report serves as the basis of a chapter on the management of Russian theatres. Critical analyses of an interesting Serb drama by M. Ban, of Count Tolstoi's *Ivan the Terrible*, and of Messrs. Dixon and Barry's books on Russia, and Mr. Ralston's *Songs of the Russian People*, complete the volume. Although so varied in its composition, an internal unity is given to the book by the earnestness with which the author urges on his countrymen the necessity of studying the Slav world for themselves, instead of resting content with knowledge derived at second-hand from Germans and Poles.

A. J. PATTERSON.

Kehrein's Mediaeval Latin Sequences. [*Latéinische Sequenzen des Mittelalters aus Handschriften und Drucken herausgegeben.* Von Joseph Kehrein.] Mainz. 1873.

THE Latin of the Middle Ages is studied now for many reasons. But a little while ago he would have been a bold man who avowed that he read "monkish" authors for any other purpose than that of picking out the facts which their books contained.

The revival of learning did one part of its work very thoroughly. Like certain other revolutions, concluded and still in progress, it proved most successful on the side of destruction. It banished the middle Latin from schools and lecture rooms, reformed missals, breviaries, and hymn-books in a linguistic though not in a theological sense, and succeeded in compelling mankind to learn ideas which were of the very essence of the Middle Ages in a dialect that was nothing if not the speech of heathen Rome.

It yet sounds as a strange heresy in the ears of many to be told that Latin has always been a living language; that

till within the last three centuries it was by far the most truly living tongue in Europe, and that although there never has been a time when there was not bad Latin in plenty, yet the Latin of no age can be called bad simply because it differs widely from the Virgilian or Ciceronian standard.

It is a mere waste of time to discuss the degrees of merit possessed by a language in different stages of its growth. No man whose opinion is worth listening to could be found who would not willingly admit that, considered simply as literature, three or four of the great Roman writers are far more important than any of their more modern successors. There are not many persons either who would not be equally ready to acknowledge that as a medium for conveying delicate shades of thought, or the more refined harmonies of verse, nothing of the middle time can be put in comparison with the earlier Latin. On these matters it cannot be said with truth that there has ever been any doubt among reasonable men, least of all among those who were content to write their mother tongue—for it was the mother tongue then of all writers and thinkers—after the fashion of their own age and country. Every page of Dante's verse shows that he was steeped to the lips in the harmonies of Virgil, yet when he wrote in Latin he expressed himself as other people of his own time did, without any archaic affectations.

The idea that a language ought to be, or can be stationary, has only become absurd to most persons during the last few years. Until that conclusion had been reached it was impossible for men not to apply the terms bad and good to forms of language in a way that had absolutely no meaning whatever.

The growth of a tongue like the Latin, which had ceased to be a peasant vernacular, is very interesting in itself apart from all side issues. The side issues in this case however raise most of the theological and political questions of the mediæval time. We are told in almost every German school-book that Luther's translation of the Bible is the foundation of the present High-German speech. This statement is, of course, not strictly accurate, but taken with needful reservations it embodies a truth which it is very useful to have before us in a compact form. What Luther's Bible has been to the German-speaking folk the Vulgate and the Roman law were to the people who used middle Latin. When darkness settled down on the Empire, the compact Roman speech would have utterly gone to pieces had there not been at hand these two unquestioned authorities to act as standards of grammar and guides in word formation.

The influence of the Vulgate began much earlier and was always far wider than that of the law-books. They were only a small company at any time who were directly influenced by legal forms, but all men who in any sort knew Latin came in constant contact with Saint Jerome's version of Scripture every time they entered a church, or in any other way became participators in religious rites. The dialect of the Church service books was made up almost solely from the current Latin version of Scripture, and contained, until the grammar theorists of the revival began to meddle with it, hardly a conscious reminiscence of the classical form of the language.

The feeling against rhymed Latin has been stronger than against any other of the so-called "barbarisms" that the Middle Ages have left us. There is no doubt more to be said in its favour than of many other such like prejudices. Rhymes in a highly inflected language cannot give the pleasure of half surprise that they furnish in simpler tongues, they are so easy to make, and rhymes of the same sort are so constantly recurring that they soon pall upon the ear. There is also another difficulty which we feel much less in modern languages. In Latin the jingles have a habit of

being rung on the same parts of speech, most commonly on the same persons and cases. Though rhymes are far more numerous in Latin than in English or German, it is not nearly so easy to find them therein of diverse parts of speech as it is with us. As a consequence, when vernacular literature had grown up, and there were rich and varied rhymed poems in Italian, French, and English with which to compare the Latin hymns it was but natural that a form of verse which at its best was but narrow should be regarded as one of the silliest corruptions of a dark period.

Prejudice of this sort however, even when it might have a good deal that is sensible to say for itself, usually defends its unreason by weak arguments. The rhymed Latin was despised not because it was in some ways an imperfect vehicle for conveying poetical thought, but because nobody had written in this manner in the early time, and it was surmised that, could Virgil and his friends have read the compositions of Notker, Ekkehard, and Thomas Aquinas, they would have pronounced them to be abominable.

Until Dr. Herman Adalbert Daniel published his *Thesaurus Hymnologicus* very little was known about any of the mediæval hymns except those few which have still retained a place in the rituals of the Roman Catholic Church. This great collection, though imperfect in so many particulars, came as a revelation of a new world of beauty to many. It was soon followed by the *Latinsche Hymnen* of F. J. Mone, a far less copious, but in many ways a richer collection. Daniel's *Thesaurus*—probably because it was the first book of the kind—attracted far more attention in this country than its successor. We probably owe to its influence a little collection of the same kind published by the late Warden of Sackville College. This book, though a mere selection, is very useful, as great pains were taken with the text; it is open to question, however, whether theological influences had not greater weight with the compiler than they would have had with one whose object in making the collection was purely historical. This book before us contains sequences only, but it is, as far as it goes, decidedly the most perfect collection we possess, more perfect than either of its predecessors not only because it contains poems which the previous editors have not seen or have ignored, but also because most laudable care has been taken to set right corrupt texts. All has not yet been done in this direction that might be, but it is clear to any one turning over the pages that very much has been accomplished, and the way paved for a really complete collection, where the texts shall be printed with at least as much care as we give to the less important among the Greek and Roman poets.

EDWARD PEACOCK.

LITERARY NOTES.

Roderick Benedix, whose comedies were among the most constant favourites of the German stage, died on the 26th ult. He was born in 1811, and after receiving a classical education declined to follow any of the learned professions, and joined a travelling troupe of actors, with whom he remained for some years; he was also not unsuccessful as a singer, having a fine tenor voice. In 1841 he produced his first comedy, *Das bemooste Haupt*, which had an immediate success that led to his adopting literature as a profession. His pieces are very numerous; *Dr. Wespe*, *Der Alte Magister*, *Aschenbrödel* (the original of Robertson's *School*), are amongst the most popular; but the comic element, which is intended to depend more on situation than on character or brilliant dialogue, is sometimes of but very faint facetiousness. The author was no friend to the fanatical Shakespeare-mania of so many of his countrymen, and has left a work ready for publication which is partly an attack upon this fashion and partly a detailed criticism of Shakespeare's dramas.

The *Cornhill* (Oct. 1) contains the second of the very interesting series of papers on the French periodical press which we have already noticed. There is much to be said for the author's view that "criticism had reached its climax of perfection under Louis XV's reign, and has done nothing but degenerate ever since." The best French criticism is unsurpassable, and there has never been better French criticism than some of what used to appear in the *Mercure* about the middle of last century. The last publication of the Stuttgart "Literary Union" is a history of the German newspaper press in the sixteenth century. Printed news-sheets, we learn, first appeared with the name of *Zeitung* in 1505, but did not become numerous till about twenty years later. In 1566 newspapers multiplied with the alarm of the Turks, and numbered sheets were first published. A half-yearly publication, *Relationes historicae*, which gave literary as well as political intelligence, first appeared at Frankfort in 1591, and continued to exist under various names till the Revolution. The first weekly newspaper was published, also at Frankfort, in 1605. The *Cornhill* also contains a very fair estimate of Southey's place in literature; without being at all unduly favourable, it reads rather like a rehabilitation, as a fair estimate of a writer who spent so much time in writing away his reputation almost unavoidably must.

In the *Revue des deux Mondes* M. Rambaud reviews and summarises the results of Zabielline's learned and diffuse volumes on the private life of the Russian tsars and their wives in the sixteenth and seventeenth centuries. The author might be described as a more exact and erudite Miss Strickland, and his information about court etiquette, &c., is curious and instructive. It appears to have been the etiquette for the tsar's mother and her relations to govern until the tsar's marriage; then they usually tried to poison his wife, but if they failed and she lived to bear a son, according to constitutional usage the dowager went out of office and the wife and her relations came in. The author accounts for the barbarous way in which Russian women painted their cheeks red and white, and their eyes black, by their desire to realize the ideal of their popular poets, who talk of "a face white as snow, cheeks the colour of the poppy, and eyebrows black as sable."

In the *Contemporary Review* Mr. G. H. Darwin makes a valuable contribution to the discussion of the question whether a demand for commodities is a demand for labour, by suggesting the importance of the element of time in the exchange, i.e. whether the equivalent for the commodities or the labour is to be handed over immediately, and if not how it will presumably be employed in the interval; but the author has still to learn from Mr. Mill, whom he is controverting, how to make a sound argument not only intelligible but also pellucid and attractive.

The *Preussische Jahrbücher* for September contains the beginning of a long dissertation by K. Dieterich on Buckle and Hegel as representatives of the German and the English mode of treating the philosophy of history. The author perhaps exaggerates Buckle's "representative" character, but the criticisms on his exaggerated faith in statistics and his unscientific use of the word "law" are to the point.

Im Neuen Reich (Sept. 26) prints some forgotten contributions of Herder to the *Königsberg Zeitung* of 1774, when Hamann, who added a good many touches of his own to the review, was its editor. The paper is a summary review of recent German literature, and is too oracular in style to have much more than historical interest. Hr. Haym, who accompanies the reprint with the necessary comments, proves by circumstantial evidence that it was probably Kant who struck out a phrase of compliment to himself which stood in the original MSS.

We learn that Mr. E. W. Gosse, of the British Museum, has in the press a volume of Lyrical Poems. It will be entitled *On Viol and Flute*, and will have a frontispiece by Mr. W. B. Scott.

The Icelandic Literary Society has just issued its annual set of publications, but they contain remarkably little of general interest. Besides legal and statistical matter connected with Iceland, and the usual summary of the news of the world, there is nothing, except an illustrated work on Greek and Roman mythology. As about forty of the fellows of the society are Englishmen, who have presumably become so in the hope of obtaining reprints of rare sagas and so on, we think the learned president might publish something a little less local. There seems to be very little literary life in Iceland. What there is to be found not in the half-Danish capital, but in Akureyri, doubtless the most out-of-the-way abode of letters in the world.

We have received a little "Narrative Poem" by A. Trümpelmann (published by Kölling, Wittenberg), entitled *Perpetua und Felicitas*, which, though unequal, and decidedly tame in the theological arguments between the Christian martyrs and Stoic philosophers, contains some passages of considerable poetic grace and polish.

Art and Archaeology.

Gavarni. *L'Homme et l'Ouvre*. Par Edmond et Jules de Goncourt. Paris: H. Plon. 1873.

ONE of the first impulses of almost every one who reads this book will probably be to regret the absence in it of any specimens of Gavarni's work. No doubt that work is pretty widely known, and easy enough of access, but still the interest and value of a volume of this sort which professedly deals, not merely with the artist's life, but also with his performances, would be enormously increased by a few judiciously selected examples of different periods. Still there is no lack of interest in the book as it stands—the authors have an apparently genuine enthusiasm for their subject, an enthusiasm which does not prevent intelligent treatment of it, and we do not think that any one will think his time lost, who has devoted a few hours to reading this account of an artist who displays with singular decision some of the most remarkable characteristics of his country and his century.

Guillaume Sulpice Chevallier (for Gavarni was an assumed name, suggested by old Pyrenean associations) was born in 1804, and was apprenticed first to an architect, then to an instrument-maker, lastly to a machine-drawer. He began early to execute small drawings for various print-sellers, and in 1825 published an album of fantastic *diableries*. About the same time he accepted an appointment at Bordeaux with the modest salary of forty-eight pounds a-year. But his employment there was uncongenial, and after about a year he set out on his travels and very fortunately found a Maecenas in a certain M. Leleu, Government surveyor at Tarbes. Here he remained for some time, nominally in M. Leleu's employment, but really wandering about the mountains at his own will and pleasure, and occasionally executing Pyrenean and other costumes for the print-sellers. It was not till the autumn of 1828 that he returned to Paris, which, save for his English excursion in 1847, he seems thenceforward to have scarcely quitted. Of Gavarni's life in Paris—he appears to have adopted the famous signature in 1829, the year after his return—of his gradual acquisition of fame, of his advancement from fashion-drawing to higher subjects, of his installation among the celebrities of his time, M.M. de Goncourt have given in this volume a full and interesting account, interesting, if they will pardon us for saying so, principally as exhibiting yet once more the life and manners of that generation of 1830, which no student of literature and art can ever weary of contemplating. It is not perhaps the very noblest side of this life which we have here presented, but the presentation is at least faithful, and so cannot be other

than valuable. But there certainly is in Gavarni's own words "une odeur de punch, de cigare, de patchouli et de paradoxes," about the history of the artist's pursuits and triumphs, friendships and loves. On the last mentioned point M.M. de Goncourt are somewhat copious, and the recital is, in a manner, edifying. An endless succession of transitory *liaisons* with innumerable facile Louisas Arsènes and so forth, characterized by no faintest spark of passion, or even pretence of passion, neither betokens depth of nature, nor is calculated to deepen one already shallow. But it is at the same time valuable to us, as evidencing this very want of depth and passion. Of these there is no trace in Gavarni. He seems, indeed, to have had plenty of that peculiar filial affection which his countrymen, as if perversely bent on reversing the precept that a man should forsake father and mother and cleave to his wife, are so fond of displaying. But otherwise it can only be said of him "amavit multas," not "amavit multum." He had little or no enthusiasm even for his art, and could not understand it in others. Balzac, Lamennais, Delacroix are all unintelligible to him and draw from him judgments which are too crude to be harsh. All the faults which have been found with him as an artist arise from this very want of depth. His prettinesses and smartnesses, his "souliers vernis," and his "troupeau gazouillant de beautés d'hôpital," do not need to have their origin sought in his early fashion-drawing and machine-drawing. The cause lies deeper. As a copyist of manners Gavarni is admirable, almost inimitable. The "creator of the Lorette," as he has been called, the preserver for ever of the studenty and the carnival of Paris, can never be forgotten or discredited. But he does not inform his creations with any of the peculiar spirit which artists of the highest class in this kind, notably for instance his rival Daumier, know how to impart. Nor are the legends, often admirably witty, which he subjoins to his drawings, less characteristic. They indicate a certain defect: either legend or drawing ought to be superfluous. A curious story is told in this volume with reference to these legends. In Gavarni's studio you might see rows of stones, standing up-side down, the design apparently finished. Of these he would say, "Ils ne m'ont pas encore parlé."

We must refer our readers to the book itself for information respecting many interesting episodes of the artist's life therein depicted. Such for instance is the account of his visit to Clichy (he seems to have been always in debt), and his too attractive pictures of the humours of the place in the *Charivari*; which are said to have drawn so much attention that it became necessary to qualify them by exhibiting in the same paper the less jovial side of an imprisoned debtor's existence. Again there is the strange incident of the notary Peytel, already famous for the interest taken in it by Balzac and by Thackeray. It was through Gavarni that Peytel addressed his appeal to the King, accompanied by a request that the artist would furnish him with poison—a request with which Gavarni seems to have thought Louis Philippe expected him to comply. At a much later date there is the visit to England, which, though not unsuccessful in a professional point of view, was socially speaking a failure. This failure is frankly admitted by M.M. de Goncourt, who however with the curious fatality which seems to attend French judgments of English character, attribute it to the vexation of the English aristocracy at the artist's delineation of London poverty and misery. The cause, one would have thought, is hardly so far to seek, when it is allowed that Gavarni was not only guilty of a gross act of personal disrespect to the Queen, but also of almost habitual discourtesy to Englishmen of letters, who sought his acquaintance and offered him hospitality. It seems however that for this he is rather to be pitied than blamed, as about this

time he became subject to accesses of a sort of mathematical and mechanical mania, which never left him till his death. Henceforward his art lost all interest for him, and was regarded merely as a bread-winner, all his spare time being spent in brooding over vague theories and vaguer projects. Unfortunately outward circumstances became unfavourable. He lost his favourite son; his house and garden, for which he had a great affection, were destroyed by some of the many "improvements" of the Empire; and his debts became more and more pressing. This later and melancholy period of his life is well and sympathetically portrayed by M. de Goncourt, who have also furnished many interesting details as to Gavarni's method and style of working during these years, in which they were well acquainted with him. He died in 1866, having accomplished it is said during his life a total of ten thousand drawings, and having assured to himself "a place in the story" of French art and French manners. It would be impossible perhaps to obtain a better idea of Gavarni's character and powers than is given us in his own portrait of himself, rendered for this volume in an admirable etching by Flameng. Affectation, want of depth, questionable taste, may be urged against him, and can hardly be denied. But a fair critic must allow him at the same time a singular grace and attraction, an excellent and admirable wit, and above all an unsurpassed facility in grasping and rendering the manners and follies and fashions, the *quicquid agunt homines*, of his country and time.

GEORGE SAINTSBURY.

THE CATALOGUE OF THE WILSON COLLECTION.

THE generous scheme of Mr. John Wilson for the benefit of the poor of Brussels has, we are glad to learn, met with the most decided success. Not only has the exhibition of his pictures, open since the 15th of August at the "Cercle artistique et littéraire" at Brussels, been largely attended, but the magnificent catalogue, to which we drew attention in the *Academy* of September 1, has been received with almost unprecedented favour, the second edition (the first consisted of a few folio copies for private circulation only) having been entirely sold out in the course of a few days. Those who, like ourselves, were too late in their application for a copy of this second edition will be rewarded for waiting by the superiority in many respects of the third, which is now ready, and which beside other advantages contains thirteen additional plates. The profits of this edition, as of the other, will be exclusively devoted to the charitable objects Mr. Wilson has in view. These we may hope will confer real and lasting benefits on those for whom they are intended. There is less fear perhaps at Brussels than in a large town like London of private munificence being misapplied and so doing harm rather than good.

But let none suppose that in buying a copy of Mr. Wilson's catalogue they are performing an act of charity, as many people fondly imagine when they give double its value for an article at a fancy bazaar. Here at all events they have the full worth of their money, Mr. Wilson disdaining, we imagine, to make the public sharers of his good work by imposing a charitable tax on the article he sells.

"Pour se payer aussi coûteuse fantaisie," says a writer in the *Gazette des Beaux-Arts*, alluding to Mr. Wilson's gift of the Constables to the Louvre, "il faut être puissamment millionnaire et légèrement excentrique, ou—pour tout dire en un mot—il faut être Anglais!"

But although Mr. Wilson's "slightly eccentric generosity" is, we are glad to hear, a proof of his being an Englishman, his artistic taste as well as his charity seems to be tolerably cosmopolitan. Among the thirty engravers and etchers employed on this catalogue we do not find one English or German name; all are French, Mr. Wilson being evidently an admirer of the modern school of French engraving. On the other hand the greater part of his pictures belong to the Dutch school of the seventeenth century. This marvellously productive school is represented in the catalogue by numerous etchings and engravings, several of

which are from some of its greatest masters' most noteworthy works. For instance the celebrated "Le Roi boit" of Jan Steen, one of the chefs d'œuvre of the collection, is at last engraved for us by Achille Gilbert, with felicitous effect of light, though the engraver has, we think, missed something of Steen's genial humour. From Rembrandt van Rijn, the chief of the school, we have the head of a man engraved by Ch. Courtry, and the splendid head of a Jewish Rabbi engraved by Leopold Flameng in a manner that the great Dutchman himself could scarcely have excelled. There is but one other painting by Rembrandt—a Golgotha—in the collection, but his predecessor and in some respects his teacher, Frans Hals, a painter whose reputation has been greatly on the increase of late, is present in several portraits. One of these, "Jasper van Westrum," a somewhat supercilious-looking young gentleman, most carefully and delicately engraved by Charles Waltner, contrasts forcibly with "A young Fisher of Scheveningue," whose coarse features are admirably rendered by Paul le Rat. Another portrait, entitled "L'homme à la Canne," has the advantage of Leopold Flameng's skill in its reproduction, and is of course excellent in its execution; but in spite of the merits of the French engravers, we own we should have liked to have seen some of these subjects entrusted to Wilhelm Unger, who enters into the character of the Dutch masters more thoroughly than any other artist. "The Chief of the Moors," a magnificent portrait by F. Bol, almost worthy of his master Rembrandt, engraved with powerful effect by Frédéric Laguillermie; a quaint young Dutch lady with an enormous ruff and fan by Benjamin Cuyp, nephew of Albert, and several other portraits of great merit, give us a good idea of the portraitists of Holland. The landscapists are not quite so well represented, but we have a fine view of Dortrecht by Jan van Goyen and Albert Cuyp, engraved by Marie Duclos; a flat Dutch landscape with its single beauty of light and shadow, by S. A. Krausz, engraved by Léon Gaucherel; a moonlight scene with black clouds throwing impenetrable shadows, by Aart van der Neer, engraved by A. P. Martial; a ferry-boat taking passengers across a pleasant river, by Salomon Ruysdael—a more cheerful scene than those usually chosen by his brother Jacob—engraved by Gaucherel; two sea pieces—the sea at a dead calm in each—by Simon De Vlieger and Willem Vander Velde, engraved by G. Greux and Marie Louveau; an uninteresting Italian landscape by Pynacker; and a wild, dreary country, with an old lightning-struck oak for its principal feature, by Jan Wynants, one of the earliest painters of Dutch landscape. Strange to say, the Little Masters of Holland, as they have been called, whose works are usually so plentiful, have scarcely found a place in Mr. Wilson's collection. They are only represented in the catalogue by one etching by F. Flameng from a painting by A. Palamèdes of "La Claveciniste"—a lady richly attired in velvet, who gives you every advantage for studying her back hair and the faultless folds of her dress as she sits with her back turned upon you at the piano. As in the celebrated "Conseil Paternel" by Terburg, not a glimpse of the interesting creature's features can we gain.

Next to the Dutch school, the modern French school occupies the largest space in the Wilson catalogue. We have no less than three etchings from pictures by Eugène Delacroix, one of which, a lion devouring a rabbit, is magnificently executed by G. Greux; four from Jules Dupré; one especially fine etching by Ch. Courtry of an autumn wood scene by Th. Rousseau; "Sheep and cattle at a stream," by Frozon, engraved by Lançon; "A view of Venice," by Ziem, engraved by Léon Gaucherel; "Christ among the doctors," engraved by A. Mongin from a water colour drawing of Decamps; and above all a lovely pensive evening scene by J. F. Millet, engraved with delicate sentiment of its quiet beauty by Ch. Waltner. Just two figures in a field arrested in their work by hearing the Angelus sound, and standing in strong relief against the evening sky with their hands folded in prayer, absorbed in pious thought. Of this engraving perhaps the greatest praise that can be bestowed upon it is that we hardly notice the etcher's perfect mastery of execution while admiring this true rendering of the painter's thought. With both painter and engraver we forget the artist in his work.

Of the English school, which was supposed to form the larger part of the Wilson collection, only four examples are illustrated in the catalogue. These however are excellent ones. "A Halt," by Morland, skilfully engraved by Paul Rajon; "The Widow and

Child," by Sir J. Reynolds, engraved by J. Jacquemart; a Landscape by Turner, engraved by G. Greux; and "The Drinking-place," by Mulready, engraved by Léon Gaucherel. Two Constables, notwithstanding the "eccentric" gift to the Louvre, still form part of the Gallery, and six other pictures of the English school, not engraved.

One picture by Rubens, rendered with splendid effect of light and shade by Ch. Waltner, and two portraits by Gonzales Coques represent the Flemish school of the seventeenth century, while the French school of the eighteenth is represented by engravings from works of Fragonard, Greuze, Lancret, Pater, and Perronneau.

Thus it will be seen, although we have not enumerated nearly all the sixty-eight engravings of this rich catalogue, that it is a work well worth possessing, and one that will form an important addition to an art library.

The present edition is limited to 1000 copies, which, in order to suit the wishes, or rather perhaps the purses, of all subscribers, are divided in the following manner:—

Nos. 1 to 40 on Whatman's paper, with all the new engravings before letters, 60 fr.

Nos. 41 to 100 on Dutch paper, with the new engravings before letters, 50 fr.

Nos. 101 to 300 with the names of painter and engraver only, 40 fr.

Nos. 301 to 500 on tinted paper, with the names of painter, engraver, and printer, 35 fr.

Nos. 501 to 1000 with the names as above and the title of the picture, 30 fr.

M. M. HEATON.

NOTES ON ART.

When the Castellani collection of gold ornaments was before the public awaiting a decision as to the desirability of its acquisition by the British Museum, the reports which appeared concerning it rarely omitted to point out that the exceeding fineness and minuteness of the ancient granulated gold work had entirely baffled all efforts at imitation on the part of modern goldsmiths. The secret by which globules of gold, so minute as to be scarcely visible to the naked eye, were made and separately soldered, to the number of thousands, into a pattern, was supposed to be practically lost to the modern craft, though preserved in a rude traditional fashion among the jewellers of St. Angelo in Vado, a remote village in the Apennines, as appears from Sig. Castellani's memoir on the subject. Since then, however, Sig. Giuliano seems to have completely recovered the ancient secret, not indeed as yet rivalling the finest specimens of Etruscan granulated work, but bidding fair to do so. Among the examples of this kind of work, exhibited by him at 13, Frith-street, Soho, are a gold bracelet and a pair of earrings, on the former of which are no less than 75,000 of these globules, arranged in patterns not slavishly copied from the antique, but always true to the antique spirit. Another splendid example of his work is the reproduction of the famous necklace from Milo in the Castellani collection.

The *Levant Herald* informs us of the removal of three bas-reliefs to Constantinople from the arch at Salonica commonly believed to have been erected on the visit of Constantine after his subjugation of the Sarmatians, though Leake (*Travels in Northern Greece*, iii. p. 244) was led by the character of the sculpture to assign it to the age of Theodosius. Leake describes what remained of the arch in his time as consisting of "two piers 14 feet square faced with stone, which were covered on all sides with a double range of figures in low relief representing the sieges, battles, and triumphs of a Roman emperor. A great part of the piers were concealed by shops of the bazaar, which cover all the lower parts of the figures on one side and the whole of them on the other." This description of the subject of the reliefs is confirmed by the sculptured part of the arch visible in the engraving of Cousinéry, *Voyage dans la Macédoine*, pl. iv., p. 29-30, Paris, 1831. It was therefore with some surprise that we read the interpretation which the *Herald* (as quoted by the *Pall Mall Gazette*, September 29) placed on the three reliefs in question, apparently on the authority of Dethier, the new director of the Museum of the Porte, and an archaeologist known at least for his services to the epigraphy of Constantinople. The three reliefs, it is said, make up together a scene from the hunt of the Calydonian boar, one of them representing

Meleager on horseback, the second a boar and a serpent twined round a tree, and the third two warriors advancing cautiously. The first is very suggestive of a Roman emperor, and the last is precisely the description we should expect of two Roman warriors as they are to be seen, for example, on the column of Trajan. It appears that several important sculptures were lately torn down from this same monument, shipped on board a foreign vessel, and in spite of the efforts of the police, conveyed away, who knows whither? At this the *Herald* raises its voice, including also in its denunciation of vandalism the exportation during the past few years of antiquities discovered in Cyprus, Ephesus, and the Troad. The treasure, intrinsically of very high value, found by Dr. Schliemann seems to have excited Levantine cupidity, and its loss to have aroused a strong feeling against foreign excavations.

The genial Dutch painter Jan Steen, whose character, it is well to remember, has been redeemed to a great extent by recent researches from the reckless imputations cast upon it by his earlier biographers, forms the subject of the first article in the current number of the *Zeitschrift für bildende Kunst*. A. van der Willigen, in his *Les artistes de Harlem, 1870*, published some documents which made it clear that Jan Steen was residing in that city at a time when, according to his slanderers, he was drinking the profits of his business as a publican at Delft. Indeed, the whole story of his keeping a tavern seems to rest upon the slender fact that he was the proprietor (probably by inheritance) of a brewery in Delft. These and the facts previously made known by Jan Steen's first vindicator, Westrheene, are commented upon by W. Bode, the writer in the *Zeitschrift*, who does not, however, contribute any information of his own on the subject. The article is illustrated by two fine etchings by W. Unger from Jan Steen's works—one, a Flemish-looking Anthony and Cleopatra of which the original is in the library of the University at Göttingen, and the other—a scene more in accordance with the artist's jovial taste—a representation of a Bean-feast from the Cassel Gallery. This latter etching reminds one strongly of Hogarth; indeed the great Dutch and the great English humourist are allied in many respects, only the humour of the latter was almost invariably pointed with satire, whereas Jan Steen directed only blunt and harmless arrows against the follies and vices of mankind.

The current number of the *Jahrbücher für Kunstwissenschaft* still appears with the name of Dr. Albert von Zahn, although that distinguished art critic died suddenly, as before recorded, on the 16th of June last. The loss of its editor will, we regret to hear, bring the useful series of *Jahrbücher für Kunstwissenschaft*, which has now extended over six years, to an end. A memoir of the deceased critic and a review of his labours in art-history in the next number, will, it is announced, be the "farewell word" of that journal to its readers.

The present number contains: 1. A learned disquisition by Wilhelm Schmidt on the equestrian statue of the Ostrogoth king, Theodorich, in Ravenna and Aachen, a work that has given rise to much criticism and difference of opinion among German art critics.—2. An account and catalogue of an old collection of pictures formerly belonging to a Princess of Orange.—3. A description of Carsten's drawings and oil paintings in Copenhagen by Herman Riegel.—4. "Duke Albrecht I. of Prussia as patron of the two Cranachs," by Prof. A. Hagen.—5. "Who was the author of the *Abrégé*?" by Julius Hübner, the *Abrégé* being it seems an early catalogue of the Dresden Gallery published in 1782 with the title "*Abrégé de la vie des peintres dont les tableaux composent la Galerie Electorale de Dresde*." The authorship of this *Abrégé* is given by the writer of the article to Heinrich von Heineken on apparently sufficient grounds, but it is a matter of small interest.—6. A short notice of a carving by Andrea Verrocchio and a correction of Vasari.—7. An account of the discovery of a picture by the little known master Andrea di Bartolo di Maestro Fredi, by Dr. Ernst Förster.

Besides throwing open his gallery, and publishing a splendid catalogue of it for the benefit of the poor of Brussels, Mr. John Wilson has opened a public subscription for the same object, which hitherto seems to have been chiefly responded to

by members of his own family. Mrs. Thomas Wilson, of London, heads the list with £100, and several other Wilsons give £50 each.

In the *Hong Kong Daily Press* of July 1st (a curious source from whence to derive art intelligence) we find a detailed description and intelligent criticism of Holman Hunt's last picture "The Shadow of the Cross," which as yet few persons have been fortunate enough to see, and concerning which the critics of the London journals have been remarkably reserved. The article in the *Hong Kong Press* was not it appears written for publication, but was merely sent by the writer for the edification of a private resident in the colony, who, finding it interesting, forwarded it to the local paper. It is evidently written by some one well versed in art criticism, though it is free from the technicalities with which so many art critics overwhelm us. The strange symbolism of this remarkable work has been already explained. A nearly nude and well built Arab carpenter stands in his workshop at sunset, and indulges in a hearty stretch of his limbs after his hard day's work. By so doing his shadow is thrown upon the wall in the exact image of a crucified man, an effect that is perceived by his companion, a woman in a coarse blue robe, with her back to the spectator, who is on her hands and knees on the floor as if looking for something. Such is Holman Hunt's latest conception of the Virgin Mary and her Son, and "so thoroughly naturalistic," says the *Hong Kong Press* critic, "so purposely unidealized is the picture, that a friend well accustomed to art, who happened to see this painting without any previous knowledge of the subject, studied it, as he assured us, long and carefully, without the slightest idea that anything more than an ordinary piece of village life was intended."

The exhibition of this remarkable work will not, it is to be hoped, be much longer delayed. It is said to be now in the hands of an eminent London firm, but the report of its sale was authoritatively contradicted by the *Athenæum*. The Queen, it may be remembered, who saw this picture when Mr. Holman Hunt first brought it to England, has given him a commission for a repetition of an important portion of it.

Edmond J. B. T'Shaggenz, a well known animal painter of Belgium, has lately died at Brussels. His last work, not yet published, but exhibited in Brussels in 1869, was a series of water colour drawings representing the anatomy of the cow. To this work it is said he devoted many years of study.

Georg Friedrich Ziebland, the chief architect employed by Ludwig I. of Bavaria at the time when he was decorating his capital of Munich, died recently at the age of 73.

The Louvre has recently acquired, we learn from the *Chronique*, an interesting and important addition to its mediaeval collection in the shape of an effigy of Blanche of Champagne, wife of Jean I., Duke of Bretagne, who died at the end of the thirteenth century. The figure is of Limoges enamel, and was executed at Limoges in the fourteenth century by the old process. It is made of a number of plates of copper fixed with nails on to a wooden mould, and is supposed to be almost unique of its kind. The destruction in some places of the copper plates render the process of its manufacture clearly visible.

The statue was formerly in the old Abbey of Hennebont in Bretagne. It is now placed provisionally in the Salle of Jewish antiquities in the Louvre.

A new and great picture (great, it is said, in every sense of the word, but certainly in size) by Hans Makart is now being exhibited at Vienna. It represents Venice doing homage to Caterina Cornaro, and contains no less than thirty-nine figures of life size. Bruno Meyer, in an article upon it in the *Beiblatt zur Zeitschrift für bildende Kunst*, accords it warm praise, and considers it the greatest triumph of Makart's art.

A painting of Venus and Tannhäuser by the rising Hanoverian artist Otto Knille is also creating some sensation in Germany. It has been lately added to the Berlin National Gallery.

The death on October 1 of Sir Edwin Landseer, R.A., at the age of seventy-one, has removed one of the most remarkable and certainly the most popular of the modern school of British artists. His life and genius have already been discussed in various journals at considerable length, and we therefore think it better to postpone our own criticism until the appearance of the memoirs which no doubt will be prepared without loss of time. The warm recognition which his works met with in his lifetime and the general grief with which the news of his death was received are gratifying indications of the soundness of our national taste.

Cornelius Varley, the brother of that John Varley to whom Mulready, W. Hunt, Copley Fielding and several more of our best English artists owed their training; the brother-in-law of Mulready, and the father of Cromwell Varley, the well-known electrician, died on the 2nd October at the age of ninety-two. He was the only survivor of the sixteen original members of the Society of Painters in Water Colours, and in the last years of his life could boast that he had exhibited longer ago than any other living painter.

Some interesting particulars with regard to the Varleys and their pupils will be found in the *Memorials of William Mulready*, by F. G. Stephens, published in 1867 by Bell and Daldy.

Correspondence.

THE ORIENTAL CALIGRAPHS OF THE LATE FREDERICK AYRTON, ESQ.

To the Editor of the ACADEMY.

SIR,—I could scarcely believe the report which appeared in the journals some weeks ago that the Trustees of the British Museum had declined the bequest of the late Mr. Frederick Ayrton's collection of Oriental caligraphs. It is known now, however, from a trustworthy source, that the statement is correct, and that the Trustees deemed it impossible for them to accept the bequest under the conditions attached to it.

Having been at some trouble to secure a copy of the will, I am able to give the following extract therefrom bearing on the subject:—"I give and bequeath to the Trustees of the British Museum all my calligraphic writings in Turkish, Arabic, and Persian, which are in my opinion worth one thousand two hundred pounds, on condition that the said Trustees do set a room apart in the Museum for the display of these valuable specimens of Oriental caligraphy, about which little or nothing is known in Europe, artistically, and also on condition that they appoint the said Assaad Effendi Mazher [he had been made a legatee in a preceding part of the will] to prepare a catalogue raisonné, which will take some three or four years; and there ought to be a general series of numbers, then a series for each writer, with an account of the contents of each piece or book, and a short account of each writer: that would occupy one side of a folio; the other side would receive the translation into English, and the whole should end with a *Silsilat-el-Khattatin* [Catena of Writers]. One hundred pounds a year for such work would not be too much to be paid to the said Assaad Effendi Mazher, which, with what I have hereinbefore given him, [£4,000 in Turkish five per cent. bonds] will enable him to live comfortably."

The only one of these conditions to which the Trustees could demur was that of providing "a room" wherein to display the caligraphs; for I cannot bring myself to believe that the outlay of from £300 to £400 for the compilation of the suggested catalogue swayed their decision. But did they deem it worth while to inquire whether the executors would not have been satisfied with a practicable compromise of the first condition? If they did not, I can only say that their remissness was unpardonable. It may be, however, that another motive actuated them, one which appears to have been put forward in their defence by a writer in the *Athenæum*, who asserts that these caligraphs have no literary value, and that Dr. Rieu, who is in charge of the Arabic MSS. at the Museum, was quite capable of drawing up the proposed catalogue, which was a work proper to his department. Should such be the fact, the case as against

the Trustees is still stronger; for there is reason to believe that the MSS. were examined very cursorily indeed. Moreover, with all due deference to Dr. Rieu, I venture to question his qualifications for judging of Oriental caligraphy. The testator, who was an experienced connoisseur, states that little is known in Europe, artistically, of Oriental caligraphy, and judging from the wretched specimens of type in which most Arabic and Persian works are printed, both here and on the continent, as well as from the very high opinion, in that respect, which the Museum authorities seem to entertain of their existing collection—among which there are very few specimens indeed of first-rate writing—he was not wide of the mark.

But supposing, for argument's sake, that these MSS. were worthless from a literary point of view, surely the Trustees or their advisers ought to have known something of their possible value as works of art. Or do they need to be informed that in consequence of the restrictions imposed by Islâm, which prohibits the making of images and pictures, the Muslims at a very early period of their history were driven to avail themselves as well of caligraphy as of geometry for the purposes of ornamentation, and that in the course of time the most elegant devices were constructed from both those sources, inasmuch that a fine specimen of handwriting is to this day appreciated by educated Muslims as highly as connoisseurs among ourselves appreciate a painting by Raphael or Murillo; and, moreover, that such specimens are of high repute, and that the writers are regarded as historical personages, whose biographies are cherished with a veneration equal to that in which we hold the lives of our most eminent painters? The flexibility of the Arabic character afforded ample scope for ornamental and decorative constructions, and among these specimens collected by Mr. Frederick Ayrtton I am assured there are many which would excite the admiration not of Muslims only, but also of European artists and limners. The facilities which Mr. Ayrtton possessed during his twenty-five years' residence in Cairo for obtaining these exemplars—many of which were purchased from decayed families driven by want to part with them—are not likely to fall to the lot of any other person, and although he modestly values them at £1,200, there is reason to believe that he paid much more for them, and that their marketable price may be estimated at a much higher figure. Besides, he was a *littérateur* himself, and his profound critical study of Oriental caligraphy is of itself a sufficient warrant for the worth of his collection.

The following summary may serve to convey some idea of the extent and character of the MSS. contained in the bequest. They number upwards of seven hundred, consisting of volumes, portfolios, scrolls, and sheets, in the Kufic, Naskh, Thulth, and Taa'lik character, some written in gold and others beautifully illuminated. The date of some goes as far back as the seventh century of the Hîgrah; many are the work of the most famous caligraphists; and all are considered of great value by the best living Muslim judges. Six of the scrolls are almost unique, only another copy of them being known to exist in the Prophet's mosque at Mekkah. As a specimen of modern caligraphy, there is a silver casket containing the inscriptions on the *Mizab-u'r-Rûhmah*, or Water-spout of Mercy, over the Kaa'bah; also a small plate of gold, with engraved Arabic characters, being the model submitted by the artist 'Abdallah Bey Zuhdy, to the late Sultân 'Abdu'l-Majid, who restored the Water-spout. The only duplicate of this casket and its contents is deposited in the Imperial Treasury at Constantinople.

I have no hesitation in saying that those who are responsible for the loss of this collection by the British Museum deserve the severest censure. The loss to the nation arising from the refusal on the part of the British Museum would have been complete, but for the public spirit and generosity of Mr. F. Ayrtton's widow, to whom the collection reverted on its refusal by the Trustees. Desirous of carrying out her husband's wishes as far as was now practicable, she has offered it to the Museum of the India Office, and I confidently hope that the Secretary of State for India in Council will know better how to estimate a bequest which, as I venture to predict, will be to Orientalists generally, European and Indian, one of the greatest attractions in that institution.

G. BADGER.

New Publications.

- BANVILLE, T. de. *Trente-six ballades joyeuses*. Paris: Lemerre.
 BESANT, Walter. *French Humourists from the Twelfth to the Nineteenth Century*. Bentley.
 BROWN, O. Maddox. *Gabriel Denver*. Smith, Elder, & Co.
 CAMPORI, G. *Memorie biografiche degli scultori, architetti, pittori, ecc., nativi di Carrara e di altri luoghi della provincia di Massa*. Napoli: Höpli.
 CHORLEY, Henry Fothergill. *Autobiography, Memoir, and Letters*. Edited by H. G. Hewlitt. Bentley.
 CLASSIKER deutsche d. Mittelalters. Begründet v. F. Pfeiffer. 1, 6, u. 8 Bd. Hartmann von Aue. 3 Thl. Iwein, od. der Ritter m. dem Löwen. 2 Aufl. Walther v. der Vogelweide. 4 Aufl. Gottfrieds v. Strassburg Tristan. 2 Thl. 2 Aufl. Leipzig: Brockhaus.
 CLAY, J. G. *The Virgin Mary and the Traditions of Painters*. Hayes.
 COLLINS, W. L. *Lucian* (Vol. viii. of *Ancient Classics for English Readers*). Blackwood.
 COUSSEMAKER, E. de. *Scriptorum de musica medii aevi nova series, a Gerbertina altera*. T. iv. Fasc. 1. Paris: Durand.
 GOODMAN, W. *The Pearl of the Antilles*. King & Co.
 HENZE, A. *Das Buch der Goldmünzen*. 4 Lfg. Neuschönfeld bei Leipzig: Henze.
 L'ŒUVRE de David d' Angers. Vol. 2^e. Paris: A. Lévy.
 LYTTON, Lord. *The Parisians*. Vol. i. Blackwood.
 QUELLENSCHRIFTEN f. Kunstgeschichte u. Kunsttechnik d. Mittelalters u. der Renaissance. Hrsg. von R. Eitelberger v. Edelberg. 5 Hft. Wien: Braumüller.
 ROSENKRANZ, K. *Von Magdeburg bis Königsberg*. Berlin: Heimann.
 RÖSTRAND et MARIEBERG. *Notices et recherches sur les céramiques suédoises du XVIII^e siècle*, par G. H. Stråle. Stockholm: Klemming.
 STREHLKE, F. *Zur Textkritik v. Goethes Werken*. Berlin: Hempel.

Physical Science.

THE GERMAN SCIENTIFIC AND MEDICAL ASSOCIATION.

THE forty-sixth *Versammlung deutscher Naturforscher und Aerzte* was held at Wiesbaden last month, the session commencing on the 17th and ending on the 24th. The attendance of members and associates was very large. Three days were devoted to general meetings and three to the meetings of sections.

The sections numbered in all eighteen, nine of which had for their object the discussion of subjects relating to medicine and surgery, and the branches of science in any way allied to them. Among those attending and presiding at these sections were Baum, von Langenbeck, Roth, Max Schulze, von Tröltsch Lieberkühn, and Rindfleisch.

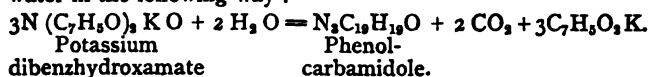
In the Section of Anthropology the presidents were von Cohausen, the director of the museum at Wiesbaden, and Prof. Lucae, and one of the most important papers read was that contributed by Prof. Virchow on the characteristics of the skulls of savage races. Wibel described some barrows on the north coast near Hamburg in which he found implements of iron plated with bronze.

Geography was represented by Rohlf, who read a paper on the proposed expedition to the Libyan Desert, Neumeyer, Radde, Schweinfurth, and Friedrichsen. Dr. Ascherson made a communication about Lorenz's journey in South America. Dr. Neumeyer described the proposed uniform organisation of meteorological observations, which formed the subject of discussion at the recent congress in Vienna, and to which attention has been directed by Mr. Scott in *The Times* of the 1st instant.

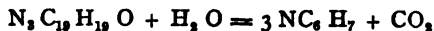
A great number of papers, almost without exception on organic chemistry, were read at the Chemical Section, which was more largely attended than any other.

Tollens directed attention to the fact ascertained by Philippi that the bibromopropionic acid, or α acid, of Friedel and Machuca prepared from bromine and propionic acid, differs in its properties from the isomeric β acid prepared from brominated allylic alcohol. With hydrogen the one forms propionic acid, the other acrylic acid. Tollens finds that the α acid when treated with potash forms on separation of hydrobromic acid monobrom-acrylic acid, which on again taking up hydrobromic acid forms bibromopropionic acid, not the α acid however but the β acid. This is of importance as it shows the analogous constitution of the two acids and indicates the presence of the carboxyl group

in the β acid, and consequently in the acrylic acid produced from it; this had hitherto been doubted. The monobromacrylic acid, produced by the action of potash on the β dibromopropionic acid, resembles very closely the acid above mentioned; it forms with hydrobromic acid β dibromopropionic acid, its potash salt however has very different characters.—By boiling sugar with dilute sulphuric acid Tollens and Grote have obtained an acid the zinc salt of which has the formula $C_5H_7O_3Zn$. It appears to be a lactic acid deficient in hydrogen of the valeryl series.—An investigation of the compounds of starch with potash and soda has been made by Tollens with the view to determine the molecular constitution of starch. The apparently thoroughly pure compound contained one atom of metal to four or five molecules of starch, which corresponds to twenty-four or thirty atoms of carbon.—Dr. Wibel showed a new and simple form of water-pump for the suction of air. The glass tube which the water descends has the diameter of small combustion tube which for the space of about three inches is contracted to a uniform bore of from 2 to 3 mm. At the bottom of this contracted part just before it enlarges to its original diameter a glass tube of equally narrow bore is let into it horizontally. As the water falls it draws the air out of this lateral tube with great force.—Graebe read a paper on the constitution of rosaniline. To arrive at a knowledge of its composition the author first endeavoured to settle the vexed question of the composition of the acid arising from the action of nitrous acid on rosaniline. He has now proved beyond all question that it has the formula $C_{20}H_{16}O_3$, and he retains the name rosolic acid for the acid obtained from rosaniline by the above method; leucorosolic obtained by the reduction of the above compound has the composition $C_{20}H_{18}O_3$. The relation in which rosolic acid stands to aurin has not yet been clearly established. Both bodies yield very characteristic compounds with bisulphite which are readily purified. When perfectly pure rosolic acid is employed colourless solutions are obtained. Just as rosaniline forms with hydrocyanic acid a colourless base, rosolic acid forms the compound $C_{20}H_{16}O_3, HCN$, which comports itself like an acid or a phenol. Again, both bodies unite with acetic anhydride to form colourless compounds. When heated with water to 200° rosolic acid forms a colourless crystalline body identical probably with that obtained by Liebermann from rosaniline.—Oppenheim has examined anew the product of the action of oxide of mercury on benzamide for the purpose of determining whether it is one of substitution or addition. He finds that it is a substitution product with the formula $Hg(C_7H_5ONH_2)_2$.—Lossen contributed a paper on the amide derivatives of hydroxylamine, in which he announced the discovery of a new class of bodies which he terms *carbamidoles*. While dibenzhydroxamic acid is decomposed by baryta water into benzhydroxamic and benzoic acids, its potash salt is decomposed by water in the following way:



Phenyl-carbamidoles is sparingly soluble in cold and moderately soluble in warm alcohol, insoluble in water, and crystallizes in brilliant prisms. It melts at 200° and can even be distilled without suffering decomposition. It combines neither with acids nor alkalis, but when heated with concentrated hydrochloric acid for several hours to 180° it takes up water and decomposes into aniline and carbonic acid:



Wislicenus gave a short description of his research on ethylene-lactic acid, a fourth modification of lactic acid, and of the difficulties he encountered in preparing pure compounds through the fact of its salts showing no tendency to crystallise.

In the Botanical Section Pringsheim gave a brief sketch of his investigations on the ramification of the *Sphacelariae*. According to Magnus, who made some remarks on this communication, there were two modes in which it takes place. In the one the new shoot is formed by an oblique partition cutting off a segment from the youngest cell of the part about to branch. The segment eventually pushed the weaker cell from which it was derived, to one side and a sympodial ramification resulted (*Stypocaulon*). In the other mode a lateral shoot is formed by a bulging out from a cortical cell (*Sphacelaria*), which bulging out subsequently developed into a branch.—Pfeffer discussed

the part played by light in the reconstruction of albuminoids from the asparagine contained in the young shoots of the *Papilionaceae*. He had already shown that asparagine is the form in which the proteinaceous nutriment of the germinating plant "wanders" from the points where it has been stored up to the growing parts where it is again converted into albuminoids. When such plants are exposed to light asparagine is not found in the growing parts, though it is abundantly present when they are kept in darkness. The influence of light, however, upon the conversion of asparagine into albuminoids appears to be only indirect. It is richer than these substances in nitrogen and poorer in carbon and hydrogen. In its formation from an albuminoid there must be a separation of the two last elements which, in turn, must be added to it when the albuminoid is reconstituted. When however a plant grows in the dark the demands of its growth and respiration consume all its available non-nitrogenous material. Asparagine then accumulates because there are no materials for its reconstruction into an albuminoid. But when the plant is exposed to the light these materials are supplied by the normal activity of the leaves and the asparagine consequently disappears.—Askenasy described the growth of the fruit-pedicle (*seta*) of *Pellia epiphylla*. It was divisible into two periods, during the first of which there was continuous multiplication of cells by division but scarcely any elongation. On the other hand during the second period, which lasts only from three to four days, cell-multiplication stopped, but the length increased from 1.2 to 80 millim. This was accompanied by a total consumption of the starch contained in the cells.

Among the papers communicated to the Physiological and Pathological Sections were the following:—Köhler, of Halle, gave details of experiments undertaken with a view to determine the physiological action of bitter substances upon the circulation and blood-pressure. He found that when cetrarin, columbin, and other bitter substances were injected into the veins a decrease of blood-pressure amounting to from 8 to 20 mm. of mercury first of all occurred in the arteries, which was subsequently followed by an increase to the extent of from 12 to 18 mm. above the tension previous to the injection. The cause of the diminished pressure which occurred even after the spinal cord and the vagus had been divided is to be looked for in the heart, that of the rise which did not occur after section of the spinal cord outside of the heart. The augmentation of blood pressure after injection of cetrarin and columbin can only be referred to excitation of the vaso-motor centre. It is difficult to say whether the acetic acid required as a solvent may not have aided the effect. The primary diminution of pressure results from paralysis of the termination of the vagus in the heart. The primary diminution is observed both in acid solutions of cetrarin, and in solutions of cetrarin in distilled water. The frequency of the cardiac contraction when lethal doses of bitter substances have been given remains unchanged up to a short time before death.—Langerhaus made some observations on the structure of the eye of the lamprey. The globe of the eye in this animal is peculiar in being destitute of any sclerotic coat, and the choroid is directly continuous with the membrana descemetii. In ammocaetes the latter membrane is very strongly developed and completely fills the anterior chamber. The iris is simply a continuation of the retina, which is attached to the choroid by a thin layer of connective tissue. As Max Schultze has shown, several layers are present in the retina. Inside the external granule layer is found the ganglionic layer, in which a double row of large ganglion cells are separated by a layer of fibres. Within the ganglion-layer lie the internal granule layer, the optic fibre layer, the granulosa and limitans interna. Processes are given off from the external ganglion-layer which penetrate the lamina granulosa externa. The granules of the rods and cones dilate to form cup-like bodies which likewise stand in connection with the granulosa externa, and these cups are situated like Hauben? upon the processes of the ganglion cells. Thus it is rendered highly probable that there is a direct connection between the connective tissue cups and membranes of the granules and the connective tissue of the granulosa externa, and, on the other hand, between the nervous contents with the processes of the ganglion cells.—Grünhagen read a paper showing that temperatures between 0° C. and blood heat exert a varying influence on the size of the pupils of

mammalian eyes which have been extirpated. The pupils of a cat's eye when exposed to blood heat, after the death of the animal, become widely dilated, and if the temperature be lowered to about that of an ordinary room they strongly contract and on further cooling to freezing point they again become strongly dilated. Grünhagen concludes that no contraction or relaxation of the sphincter pupillae takes place as Brown-Segard and H. Müller believe, but that the phenomena are due to a differing capacity for imbibing fluid which the iris possesses at different temperatures. He holds that the tone of the tissue of the iris is lost immediately after death by the absorption of water, whilst on exposure to great cold water is again given off. That water is really given off in the latter case is rendered probable by the reaction of the lens to cold which is rendered cataractous at 0° C. owing to the formation of vacuolae in its substance. The lost excitability of the musculature of the iris can be restored even after the lapse of two days if the iris be again exposed to a blood heat. Grünhagen further showed that on cooling the muscular tissue of frogs to 0° its disposition to react upon the application of a mechanical stimulus or its excitability was greatly increased, and that by this means it is possible to demonstrate muscular contraction without participation of nerves. The contractions so produced can produce secondary convulsions.—Thoma described the migration of white corpuscles into the lymphatics of the tongue of the frog. He injected the lymphatics of the living animal with an extremely dilute solution (1-2000th or 1-8000th) of silver nitrate, and found that with certain precautions this did not lead to stasis of the blood in the blood-vessels, but only to a lively exodus of the white corpuscles from their interior. After a time the re-entrance of the corpuscles into the vessels through certain stomata in their walls, marked by a precipitation of the silver, is observed. In a second series of experiments the lymphatics were injected with a dilute emulsion of cinnabar in a three-quarters per cent. solution of common salt. The cinnabar is in part deposited in the stomata of the lymphatic vessels, partly passes through them and is deposited in the tissues in the form of small round cloudy patches. The evidence of the identity of the stomata brought to view by means of cinnabar with those rendered apparent by means of silver nitrate is obtained by their peculiar grouping in the lymphatics of the frog's tongue, and, secondly, by the subsequent injection of silver nitrate into the same vessels. The injection of cinnabar causes very little disturbance of the circulation. If a lively exodus of the white corpuscles from the blood-vessels be produced by making an abrasion of the surface the migrating cells quickly make their appearance in the stomata of the lymphatics marked out by the cinnabar. They then take up the particles of cinnabar into their interior, which causes them to lose their activity and accumulate in the stomata. They immediately appear in the form of cauliflower-like excrescences projected on the inside of the lymphatics which break up into thin constituents—cinnabar-holding cells. These are seen in motion in the lymphatics, and may be traced thence into the cervical lymphatics and into the blood. In these researches a remarkable uniformity in the track pursued by the white corpuscles was observed. They then pass from the vessels into the tissue by a series of sharp zig-zag movements, and all travel at about the same rate.

In Section 5 (Mineralogy, Geology, and Palaeontology) the presidents were von Dechen, Koch, von Zepharovich, and Geinitz. Prof. Sadebeck, of Kiel, alluded at the opening of the meeting to the death of Gustav Rose. Distinguished, he said, by his searching critical gift of investigation, he had always selected the most abundant minerals for examination. To him we owe the means of distinguishing monoclinic and triclinic feldspars, a discovery which he moreover applied to petrography and opened the way in Germany for the investigation of finely granular and compact rock-masses in microscopic sections. The relations of chemical and physical properties to crystalline form were placed on a definite basis by him. He took the most active part in the development of the doctrine of zöomorphy; it was he who deduced the relation of electrical polarity to crystalline form in tourmaline and pyrites. Again, in descriptive crystallography he was the first to bring into use the graphic method, now known as Quenstedt's method of projection, and to devise the best method of drawing crystals. The third edition of the only text-book which he published, that

on the Elements of Crystallography, was about to appear, but he did not live to see it through the press. All who knew him will ever remember the gentle, kindly, noble Gustav Rose. We can adopt no better means of honouring his memory than by pursuing the work which he has broadly marked out for us. His labours not only yielded abundant results, but indicate to students of his science the proper method of further investigation.—Dr. Ochsenius announced the discovery of glauberite at Wester-Egeln in North Germany. He directed attention to the fact of salt beds, like those of Kalucz, Stassfurt, and Leopoldshall, having been found within the last few months in this locality, and traced the many resemblances between them and the corresponding deposits in Peru, Bolivia, Chili, Orinoco, &c. The small depth at which they are met with is due to an upheaval, which is easily apparent at Wester-Egeln and at Tarthun. The clay beds overlying the glauberite resemble those of Wieliczka and Hallein, and differ from those of Stassfurt, in containing distorted crystals of rock-salt. Their faces however are not hollow but convex and sometimes show octahedral faces. Their appearance recalls the so-called rhombohedra of quartz from the keuper of Göthj and the zechstein of Frankenburg. Pyrites is sometimes found on their faces, an association of great rarity at Stassfurt. At greater depths crystals of red rock-salt have been met with, which in their hemihedral form resemble a corresponding well-known variety of galena from the Hartz. Boracite also occurs at Wester-Egeln, and hydroboracalite has recently been found at Stassfurt. The discovery of these minerals supports the view advanced in 1839 that Wester-Egeln forms the centre of the Magdeburg-Halberstadt basin.—Prof. Sandberger in describing the crystalline rocks of Nassau showed that the palaeozoic rocks bore a striking resemblance to those of tertiary times, a diabase, for example, to an old basalt or dolerite. The silurian diabase consists of oligoclase, augite, hexagonal titanite iron, and only differed under the microscope from dolerite in that olivine was more sparsely present. The green constituent of diabase, which has not yet been isolated and analysed but is supposed to be a product of the decomposition of augite, occurs with great distinctness at Kupferberg in the Fichtelgebirge. In Nassau and in other districts of South Germany phosphorite and staffelite are only met with at places where diabase has reached the last stage of disintegration, and the same phenomenon is noticed at Rossberg near Darmstadt in the case of tertiary rocks. Phosphate of lime is less soluble than carbonate, and constitutes a material for the petrification of corals and the formation of beautiful pseudomorphs after calcite. The iodine of staffelite and osteolite must have been derived from the diabase and basalt and must be present in other volcanic rocks. New localities for olivine were mentioned: a dark black-green rock from Tringenstein contained much olivine, the greater part of which was already converted into serpentine, the transition being beautifully shown in some microscopic sections. The author of this paper shewed an interesting series of specimens from an obsidian stream, of El Guamani, sent him by Reiss, showing the gradual transition of obsidian through typical perlite into trachyte.—Prof. Möhl, of Cassel, read a very elaborate paper, which it is impossible to condense, on the mineral constitution and distribution of phonolite, illustrated with many hundred rock-sections and thirty beautifully executed plates that are to appear in his forthcoming work. He finds that tridymite occurs in abundance and beautifully crystallized in the hayne-phonolite of Javalato Lazio (Vesuvius) and Hohlstein (Rhône), and in the nepheline-phonolite of Milseburg, Bubenbad, Pferskopf, and Alschberg, and in the mica-phonolite of Teneriffe.

Dr. Flight read a paper by Prof. Story-Maskelyne and himself on the method of determining silica by distillation with hydrofluoric acid, and described the apparatus which is employed in the British Museum Laboratory for that purpose. A number of important precautions that are to be taken in conducting an analysis by this process were given, and the peculiar advantages attending it were pointed out. Meteoric augite, enstatite, bronzite, and other silicates that do not gelatinise with acid, as well as asmanite, have been analysed in this manner.—Another paper directed attention to some crystals of phosphorus which had been made by Mr. W. Douglas Herman and measured by Prof. Story-Maskelyne. These crystals are

formed by the spontaneous evaporation of ordinary phosphorus in vacuo and in darkness. In a few weeks they attain a considerable size, a length of from three to five mm., and are of great beauty. They are colourless, transparent, possess great refractive power, and bear a great resemblance to cut diamonds. Only a short exposure to light renders them yellow and opaque. The crystals belong to the isometric system, and exhibit a very great number of faces.

A note was then read by Dr. Flight on some observations made by Prof. Story-Maskelyne and himself on the colour of diamonds. It was mentioned that in 1867 there was exhibited in Paris a diamond possessing a rose colour which, after the stone had been exposed for a few minutes to diffused light, completely faded away. A straw-coloured diamond from the Vaal River when heated in a porcelain tube to a red heat in an atmosphere of hydrogen lost all colour, but recovered it again by a few minutes' exposure to diffused light. Various experiments were made: by employing a more intense heat, by using chlorine in place of hydrogen, by preserving the diamond, for some days in the dark, after it had been heated; in each case exposure to light for a few minutes restored the lost colour. It was suggested that this phenomenon may be intimately connected with the phosphorescent properties of the diamond.

Prof. Zirkel gave a short *résumé* of the contents of his new work on the microscopic characters of minerals and rocks.—Prof. Laspeyres described and exhibited some curious glacier markings of diluvial times on a slab of porphyry from Quetz, near Halle.

The lectures at the general meetings were by Prof. Neubauer, on "The Labours of Liebig in the development of Physiological Chemistry"; Prof. Oscar Schmidt, on "The Theory of Descent in its Application to Man"; Prof. Virchow, on "Natural Science in its Relation to Moral Training"; Prof. Sandberger, on "The Upper Rhine Valley in Tertiary and Diluvial Times"; Dr. Snell, on "Scientific and Medical Views Contrasted with the Present Interests of Education"; Dr. Radde, on "The Steppes of Russia"; and Prof. Meynert, on "The Mechanical Structure of the Brain."

Further notices of papers read at this meeting will appear in our scientific notes.

The next meeting will be held at Breslau.

New Publications.

- ADLER, A. Ricardo und Carey in ihren Ansichten ueber die Grundrente. Leipzig: Gebhardt.
- ALTUM, B. Forstzoologie. ii. Vögel. Berlin: Springer.
- BALANSA, B. Ascension du mont Humboldt (Cando des Néo-Calédoniens). Paris: Martinet.
- BRAINE, A. et GIRARD, M. L'Attacus Atlas, le géant des papillons. Son introduction en France. Paris: Martinet.
- BRISSE, C. et ANDRÉ C. Cours de physique à l'usage des élèves de la classe de mathématiques spéciales. 3^e fasc. Paris: Daunod.
- CHLEBIK, F. Die Frage ueber die Entstehung der Arten logisch und empirisch beleuchtet. Berlin: Denicke.
- COLLENOT, J. J. Description géologique de l'Auxois. Paris: Savy.
- CORBELLI, P. Dizionario di floricultura. Fasc. i. Reggio Emilia: Bondarelli e Gasperini.
- DARWIN, C. Viaggio di un naturalista intorno al mondo. Prima trad. ital. del Prof. M. Lessona. Torino: Unione Tip-edit. tor.
- DESJARDINS, E. Aperçu historique sur les embouchures du Rhône. Paris: Durand et Pedone-Lauriel.
- DUTAILLY, G. Sur l'existence d'un double mode d'accroissement dans le thalle du Metzgeria furcata. Paris: Martinet.
- FLICHE, H. Manuel de botanique forestière. Nancy: Berger-Levrault.
- GAUSS, C. F. Werke. Band iv. Göttingen: Vandenhoeck und Ruprecht.
- GÖPPERT, H. R. Ueber die Folgen äusserer Verletzungen der Bäume insbesondere der Eichen und Obstbäume. Ein Beitrag zur Morphologie der Gewächse. Breslau: Morgenstern.
- GRELLE, F. Elemente der Theorie der von reellen Variablen abhängigen Functionen. Hannover: Helwing.
- HOPPE, J. Die Analogie. Eine allgemein verständl. Darstellung aus dem Gebiete der Logik. Berlin: Denicke.
- KERNER, A. Die Schutzmittel des Pollens gegen die Nachtheile vorzeitiger Dislocation und gegen die Nachtheile vorzeitiger Befruchtung. Innsbruck: Wagner.
- KRAUSE, M. Zur Transformation der Modulargleichungen der elliptischen Functionen. Heidelberg: Winter.

- KUTZNER, J. G. Naturbilder-Studien aus dem Natur- und Menschenleben. 1st Lief. Leipzig: Siegmund und Volkering.
- LEROY, A. Dictionnaire de pomologie. F. iii. Paris: Lib. agric. et hortic.
- MORIN, M. Œuvres de Buffon, avec les suppléments de Lacépède, Cuvier, Reaumur, enrichies d'histoires et d'anecdotes empruntées aux voyageurs français et anglais. Paris: Vernot.
- ROSCOE, H. E. Kurzes Lehrbuch der Chemie. Unter Mitwirkung d. Verf. bearb. von C. Schorlemmer. Braunschweig: Vieweg.
- SALMON, G. Analytische Geometrie der Kegelschnitte mit besond. Berücksicht. der neueren Methoden. Frei bearb. von W. Fiedler. 3^e verb. Auflage. Leipzig: Teubner.
- SCHIAPARELLI, G. V. I precursori di Copernico nell' antichità. Ricerche storiche. Napoli: Hoepli.
- SCHIAPARELLI, G. V. Le Stelle cadenti. Tre lettere. Milano: Treves.
- SCHORLEMMER, C. Trattato delle combinazioni del carbonico o di chimica organica. Prima trad. ital. per cura di M. Sella. Milano: Vallardi.
- STANTON, H. T. The Natural History of the Tineina. Berlin: Mittler und Sohn.
- THIELE, J. Die Farbenlehre als Hilfswissenschaft für Künstler. Berlin: Nicolai.
- THOMSON, C. G. Hymenoptera Scandinaviae. Tom. ii. Stockholm: Bonnier.
- TÖRNEBOHM, A. E. Ueber die Geognosie der schwedischen Hochgebirge. Stockholm: Bonnier.
- VON MÖLLENDORFF, O. Beiträge zur Fauna Bosniens. Görlitz: Tzschaschel.

History.

Ritter's History of the German Union. [*Geschichte der deutschen Union von den Vorbereitungen des Bundes bis zum Tode Kaiser Rudolfs II. (1598-1612). Von Moritz Ritter.*] Baader: Schaffhausen. Bd. i., 1867. Bd. ii., 1873.

It is perhaps a feeling of pride in the restored unity of their country which is sending so many German writers to search into the records of the Thirty Years' War. Those who have lived to see their country revive can tell without a blush how their country fell. And those who remember Herr Ritter's first volume as long ago as in 1867, will be glad to welcome this further instalment of his work in 1873.

The subject which Herr Ritter has chosen is certainly a proof of his great self-abnegation. In its whole course the Union never did anything much worth doing, and it expired unlamented amidst the sneers alike of those who forsook it, and of those who trod it to the ground. All the more thankful ought we to be to a writer who will tell us impartially what it was and what it tried to do. And this is just the quality in which the book is most conspicuous. It is, one must confess, especially in the first volume, a trifle dreary. But how could it be otherwise when it has to tell, page after page, how a number of Protestant princes believed themselves to be in the greatest peril, which could only be averted by forming some sort of league amongst themselves; and yet how, when it came to the point, they never could make up their minds on what terms the league was to be contracted, or could even agree to allow that anybody whatever should give way to anybody else. And yet this seems to have been the normal condition of affairs with the German Protestants during the last quarter of the sixteenth century and the first few years of the seventeenth.

Soon after the commencement of the second volume, we come upon more interesting ground. The peculiarities of the Austrian federation are well brought out, and its unsatisfactory political condition is shown to make a collision between the ruler and his subjects almost inevitable; quite inevitable, we may perhaps say, when a grave religious dissension was added to the struggle between monarchy and aristocracy. But the main interest of the book lies in the progress of the German disunion. It should be read as a companion to Gindely's *Rudolf II.*, taking as it does

rather a more favourable view of Christian of Anhalt's character than Gindely is inclined to take. But the main points are the same in both writers, as are the main points of the character of Maximilian of Bavaria. On one side we have the feverish activity of a man who believes that nothing short of a revolution will be of any use; on the other side we have the law-loving attachment to ancient forms, which nevertheless contrives now and then to misinterpret the law in its own favour. And then comes the seizure of Donauworth, of which we have all read so often, but which gives occasion to Herr Ritter to explain the religious and political position of these South German Towns, in a way which reminds us of Ranke's clear exposition of the religious and political position of the North German Bishopricks in his essay *Zur deutschen Geschichte*, and which should be borne in mind by any one who wants to understand the fate of these towns under the Imperial Commissions in 1627 and 1628. The last volume yet published comes to an end with the formation of the Union at Ahausen in 1608. The third and final volume is to bring us down to the death of Rudolf II., in 1612, and will of course include the war of succession in Cleves; and we can only hope that it will be equal in merit to the second volume, which is decidedly an improvement upon the first both in manner and in matter.

Possibly some of our readers may like to see how Christian of Anhalt, the shifty diplomatist, wrote to his wife. Here then is an extract (ii. 151).

"Et certes, sans flatter, j'affirme constamment qu'aux perfections tant du corps que d'esprit il n'y-a dame laquelle vous surpasse; laquelle seule félicité Dieu m'a permis de sa divine libéralité l'ayant dénié un tel bien a tant de millions des hommes. C'est pourquoy que j'ay tousjours dont je me puis resjouir par la douce souvenance de vos faveurs. Et, ma divine dame, je me jette totalement en vos bras, vous baisant un million de fois les belles mains, m'assurant que Dieu me rendra toujours de plus en plus capable, afin que je puisse perpétuellement servir, chérir et honorer vos beautés et rarités angeliques, ce que me fait oublier l'obscurité et fange de ce monde ténébreux, et soupirer avec grand désir à la clairté et gloire qui est tout lumière et béatitude éternelle."

This habitual use of the French language must have told in the end against the Unionist party. They were not only revolutionists, but they were un-German. Maximilian of Bavaria or George of Saxony would as soon have thought of writing to their wives in French as Pym or Cromwell would have done.

SAMUEL R. GARDINER.

Narratives of the Rites and Laws of the Yncas, translated from the original Spanish manuscripts and edited, with Notes and an Introduction, by Clements R. Markham, C.B., F.R.S. London: Printed for the Hakluyt Society. 1873.

MR. MARKHAM'S new volume contains, 1st, *An Account of the Fables and Rites of the Yncas*, by Christoval de Molina; 2nd, *An Account of the Antiquities of Peru*, by Juan de Santa Cruz Pachacuti-yamqui Salcamayhua; 3rd, *A Narrative of the errors, false gods, and other superstitions and diabolical rites in which the Indians of the province of Huarochiri lived in ancient times*, by Don Francisco de Avila; 4th, *Report* by Polo de Ondegardo. These four papers were among the narratives and reports furnished to Herrera for his history of the West Indies, of which he made such unintelligent use. They were found in the National Library at Madrid (B. 135) by Don Pascual de Gayangos, but not published in the original. We have to thank Mr. Markham for translating them, and the Hakluyt Society for selecting them to form a volume of their series.

It is difficult to say which of the four is the newest and most interesting. Mr. Markham seems to think the first by Don Christoval de Molina. Molina had peculiar opportu-

nities for collecting peculiar information. He had mastered the Quichua language, and being priest of the hospital for natives at Cuzco was intimately acquainted with the Peruvian character. He wrote between 1570 and 1580, while Dr. Don Sebastian de Artaun was bishop of Cuzco, at a time when many among the natives could remember the days of independence. I think, however, that the narrative of Salcamayhua, although less accurate than Molina's report, is of the greatest moment. It is the only account written by a native of Peru which we possess up to this time, and, by giving us a sample of the rude materials with which the Spanish or metis writers had to deal, shows us the difficulties with which they had to contend while composing their histories.

Salcamayhua, who wrote about 1610 or 1620, was the descendant of a great Indian family the chiefs of which were the first who came to the tambo of Caxamarca to be made Christians, "renouncing all the errors, rites, and ceremonies of the time of heathenry, which were devised by the ancient enemies of the human race, namely the demons and devils." He begins with a profession of Catholic faith, and then proceeds to affirm that he heard "from a child, the most ancient traditions and histories, the fables and barbarisms of the heathen times, which are as follows; according to the constant testimony of the natives touching the events of past times."

In the beginning there was all over Peru a *Purun-pacha*, "a time of wildness," when all the nations of the four provinces came from beyond Potosi in four or five armies arrayed for war, and settled in the different districts as they advanced. This period was called *Ccallac-pacha*, time of the beginning, or *Tutayac-pacha*, time of night, and lasted for a vast number of years. When the country was peopled, there was a great want of space, and, as the land was insufficient, then wars broke out and there was no rest from them, insomuch that the people never enjoyed any peace. It was even the time when the *Hapi-nuñus*, the devils, walked visibly all over the land, and it was unsafe to go out at night, for they violently carried off men, women, and children. But "then, in the middle of the night, they heard the *Hapi-nuñus* disappearing with mournful complaints, and crying out, 'We are conquered! alas, that we should lose our bands!' By this must it be understood that the devils were conquered by Jesus Christ our Lord on the Cross on Mount Calvary."

Some years afterwards, there arrived in the four provinces, "a bearded man, of middle height, with long hair, and in a rather long shirt. They say that he was somewhat past his prime, for he had already grey hairs, and he was lean. He travelled with his staff, teaching the natives with much love, and calling them all his sons and daughters. As he went through all the land he performed many miracles: the sick were healed by his touch; he spoke all languages better than the natives. . . . He was called *Tonapa Uiracocha nipacachun*; but was he not the glorious apostle St. Thomas?" Once he came very tired to the village of a chief called *Apo-tampu*, who listened to him with friendly feelings and to whom it is said that he gave a stick from his own staff, "and through this *Apo-tampu*, the people listened with attention to the words of the stranger, receiving the stick from his hands. Thus they received what he preached in a stick, marking and scoring on it each chapter of his precepts. The old men of the days of my father, Don Diego Felipe, used to say that *Caci-caci* were the commandments of God and especially the seven precepts; so that they only wanted the names of our Lord God and of his son Jesus Christ our Lord; and the punishments for those who broke the commandments were severe." After preaching through the various provinces, breaking idols, and turning into stone

whoever refused to listen to him, "*Tonapa* then followed the course of the river *Chacamarca*, until he came to the sea. This is reported by those most ancient Yncas."

Apu-tampu, *Tonapa's* friend, had a son named *Manco-Ccapac-Ynca*, or *Apu Manco-Ccapac*, who, after the death of his father and his mother, "assembled his people to see what power he had to prosecute the new conquests which he meditated." After some adventures he founded Cuzco and married one of his own sisters named *Mama-Ocillo*, "and this marriage was celebrated that they might have no equal, and that they might not lose the caste. Then they began to enact good laws for the government of their people, conquering many provinces and nations of those that were disobedient. The people of the four provinces came with a good grace and with rich presents. The tidings of a NEW YNCA had spread widely. Some were joyful, others were afflicted." From *Manco-Ccapac-Ynca* is descended the powerful dynasty of the Yncas, whose genealogy, as given by *Salcamayhua*, is as follows:—

- Apu-Tampu*,
friend of *Tonapa*, about A.D. 50-100
- I. MANCO-CCAPAC YNCA ab. A.D. 100
 - II. SINCHI-RUCA YNCA
 - III. YNCA LLOQUE-YUPANQUI
 - IV. YNCA MAYTA CCAPAC
 - V. YNCA CCAPAC YUPANQUI
 - VI. YNCA RUCA
 - VII. YAHUAR-HUACCAC YNCA YUPANQUI
 - VIII. UIRA-COCHA YNCA YUPANQUI
 - IX. PACHACUTI YNCA YUPANQUI
 - X. TUPAC-YNCA-YUPANQUI
 - XI. HUAYNA-CCAPAC-YNCA.

XII. HUASCAR YNCA, XIII. ATAHUALLPA (1533), XIV. MANCO YNCA.

It is almost the same genealogy as that given by *Garcilasso*, but the difficulty is how to reconcile the quasi-contemporaneity of the new *Ynca Manco-Capac* with *Tonapa-St. Thomas*, and the date of the Conquest by the Spanish. It is impossible that only twelve generations should have reigned during more than fourteen centuries: but poor *Salcamayhua* did not trouble himself much with chronology. He contented himself with collecting as many traditional stories as he could, and succeeded in giving an account of the last dynasty that ever reigned over Peru before the Spanish conquest. That he knew nothing of the kings who lived in the *Purun-pacha*, the time of wildness, is self-evident; but from one word which escaped him, we may gather that even amongst the Indians of his neighbourhood, the memories of the primitive dynasties were not entirely lost. Speaking of *Manco-Ccapac's* accession, *Salcamayhua* or his informers narrate that "the tidings of a NEW YNCA had spread widely," thus showing unconsciously that they had a vague acquaintance with the OLD YNCAS whose names and legends *Montesinos* succeeded in collecting afterwards.

It is hardly necessary to say that the whole publication has been executed with Mr. Markham's usual accuracy. The map, plate, and index have been made *con amore*; Mr. Markham has even compiled a Dictionary of most of the Quichua words cited in the book. I wish only he had given a literal translation of the Quichua texts that occur so

frequently in *Molina's* and *Salcamayhua's* pages: they contain so many corrupt forms of spelling and so many unknown words that it is often impossible to make out their exact meaning. I know that Mr. Markham, who succeeded so well in translating the difficult *Ollanta*, would have equally well succeeded in correcting and interpreting those texts, and that is the reason why I so much regret that he did not undertake the task.

G. MASPERO.

La Conquête de Constantinople. Par Geoffroi de Ville-Hardouin, avec la continuation de Henri de Valenciennes. Texte original, accompagné d'une traduction, par M. Natalis de Wailly. Paris: Didot. 1872.

ALMOST a century before Joinville, and perhaps similarly urged on by his comrades to tell the tale of the great deeds they had done together, Villehardouin wrote, without having any model to imitate, and in the somewhat rude dialect of the period, an account of the conquest of Constantinople by the French and Venetians. His work is our oldest historical book in French prose, which with some slight help is still easy to understand. It was read and admired at once, and Joinville (whose nearest relations were among Villehardouin's companions, though the editor seems to be incorrect in mentioning his father) may have been partly incited by it to write his *History of St. Louis*; which however had a very different date, as the MSS. lay long neglected.

M. de Wailly, who had already given us a valuable edition of Joinville, has now completed his labour of love by editing Villehardouin. We do not see that he has anywhere compared the language of the two, or shown whether there are traces of Joinville being influenced by the style of his predecessor. He has given however a valuable glossary of the early French words. In the MSS. of Joinville we can trace the dying out of the old terminations, for whereas in the best MS. the *s* of the nominative is still preserved, in the next MS., less than half a century later, this (together with the distinction of form between the nominative and objective cases) has perished. In Villehardouin of course the ancient terminations are fully preserved. Thus *sires* is the nominative, *sire* the vocative, *seignor* the objective case; while *seignor* is the plural nominative and vocative, and *seignors* the form when governed by another noun. The vocabulary contains some words which have survived in English better than in French, e.g. host, barge, bacon, plea, mile, mischief. Gibbon, who in his sixtieth chapter has made the most admirable use of our author, several times remarks on his language; thus he speaks of "the original and expressive denomination of *vessiers*, or *hussiers*, from the *huis* or door, which was let down as a drawbridge; but which, at sea, was closed into the side of the ship." Perhaps the editor has hardly given enough of this kind of explanation, but has limited himself too strictly to printing a list of the old forms. His first object was of course to ascertain which was the most authentic manuscript; as Dom Brial in 1822, Paulin Paris in 1838, and Buchon in 1840 had each preferred different MSS., so different that we may be said to have three Villehardouins instead of one. The editor has followed Dom Brial (as he followed Ducange's choice in 1657) in selecting MS. 4972 in the *Bibliothèque Nationale* as the best. This MS. was written, perhaps at Venice, by an Italian copyist in the time of Philip of Valois. Venice, where the MS. long remained, and where the first edition was published in 1573, may almost claim an equal share in our historian, as he seems often to give the views of the famous Doge Henri Dandolo, the real chief of the expedition. A MS. very similar to the Venetian is at Oxford. The Italian copyist did his work honestly, but he omitted some things and rather disfigured the names,

and hence other copies must be referred to for help. 'B' is a MS. of similar age, probably copied in the Isle of France, or rather rewritten, the alterations of phrase and adaptation to the language of the fourteenth century showing the continued popularity of the narrative. Buchon again has printed from MSS. which are written in a Picard or Flemish dialect of French, instead of in Villehardouin's own dialect of Champagne. Paulin Paris prefers an inferior MS., which however, having been probably copied in the Isle of France, comes nearer to the author's own dialect than the Picard MSS. On the other hand the editor has followed a Picard copy for Henri de Valenciennes, the continuator of Villehardouin, though he has made the text more uniform by help of a collection of original charters belonging to Aire in Artois, as Valenciennes is in the same province. He had made a similar use of charters in his edition of Joinville. We may give a short specimen of each.

Villehardouin, § 171: "Li murs fu mult garniz d'Englois et de Danois, et li assauz forz et bons et durs. Et par vive force monterent des chevaliers sor les eschieles, et dui serjant, et conquistrent le mur sor als; et monterent sor le mur bien quinze, et se combatoient main à main as haches et as espées."

II. de Valenciennes, § 509: "Quant li empereres vit ke Lyenars ne pooit escaper sans mort u sans prison, il monta sor un sien cheval Moriel, et le hurta des esperons, et s'adrecha vers un Blac. Et quant vint à l'aprocier, il le feri parmi le costé de la lanche, si ke li fiers en parut d'autre part; et chil ki le cop ne pot soustenir, cal à terre comme chil ki ne pot mais. Moriaus fu navrés en deus lius."

Little is known of Villehardouin himself. The small village which gave him its name is near Troyes, the capital of Champagne, and he was Mareschal of that province, the court of which was one of the most polished in Europe. In fact all the early French historians came from this north-eastern part of France, where the French and German races mingle. From the arms of his nephew, the Prince of Achaia, as compared with those of the historian (p. iii), it is clear that Villehardouin was younger than his brother, the prince's father, and on the whole his birth may be dated not long after 1150. He was of an age and experience well fitted to obtain the confidence of his comrades when he took the cross in 1199, and he seems to have acted throughout in complete accordance with the Doge; they saved the army when the Emperor Baldwin madly threw away his life in the war against Calo-Johannes the Bulgarian king. Villehardouin was a good negotiator, and often took the lead in the business of the Crusade, which required much management, as it was difficult to keep the adventurers together in any way. He is silent about Innocent III.'s strong disapproval of the buccaneering attack on Constantinople, and merely says of the elder Simon de Montfort, who turned back from it, that he "ot fait son plait al roi de Ungrie, qui amis estoit à cels de l'ost; et il s'en ala à lui et guerpi l'ost." It is true that Gregory VII. had long ago thought (and Alexius Comnenus had good reason for suspecting such a design) that a firm footing in Constantinople was almost indispensable before the Holy Land could be recovered, that country being untenable in a military sense, except by a power which holds either Egypt or the lands to the north-east of Palestine. And so it is argued here, § 96, "Et sachez que par la terre de Babiloine (*i.e.* Egypt) ou par Grece iert recovrée la Terre d'oltre-mer (*i.e.* Palestine), s'ele jamais est recovrée." (Compare too §§ 30 and 198.) But in fact the adventurers, like the Normans before them, were looking to get lands for themselves in the Holy War, and a very slight pretence drew them off to attack the rich capital of the East. They went at the invitation of an exiled prince, just as Amadis of Gaul, or any of the old heroes of romance, might have gone, and utterly disregarded the injunctions of the Holy See. It is only from the Pope's letters too that we

know of the atrocities they committed—Villehardouin says nothing about them. He reserves his laments for the French nobles who fall in the field. What Scott makes Claverhouse say of Froissart is equally true of the "Mareschal of Champagne and of Romania":—"With what true chivalrous feeling he confines his beautiful expressions of sorrow to the death of the gallant and highbred knight, of whom it was a pity to see the fall, such was his loyalty to his king, pure faith to his religion, hardihood towards his enemy, and fidelity to his lady-love. But truly for sweeping from the face of the earth some few hundreds of villain churls, who are born but to plough it, the highborn and inquisitive historian has marvellous little sympathy." He just mentions the common soldiers once, § 394, "les povres et les menus qui ne valaient gaires, fist mener en Hungrie; et les autres qui auques valaient, fist les testes colper." Of the ruin brought on Constantinople by the three dreadful fires kindled by the Franks he merely says, § 247, "et plus ot arses maisons qu'il n'ait es trois plus granz citez del roialme de France." And yet the results of the expedition, as told by himself, are enough to show the political folly of an enterprise which ruined the Empire that was the only bulwark against the Turks. The Latins could so little replace the Greek government that they were no match for even the neighbouring Bulgarians, and the last events that Villehardouin relates are the deaths of Baldwin of Flanders and Boniface of Montferrat, the leaders of the Latin Crusade, in battle against "Johannis le rois de Blaquie et de Bougrie." Perhaps the views of the common soldiery may be better represented by Robert de Clari (in the Amiens district), whose description has been lately prepared for publication by Count Riant. Henri of Valenciennes narrates the exploits of the Emperor Henry, who succeeded his brother Baldwin, but the Picard writer inserts speeches and romantic narratives in a way which led Paulin Paris to suspect that the account was written originally in verse. The good war-steeds Bayart and Moriaus (Moreau) have their full need of praise in this part of the history. In both authors the editor has kept to the old forms of the names of places and has taken considerable pains to identify them; and a map by Auguste Longnon has been added—considerable help of course being derived from Buchon, *Recherches et matériaux pour servir à une histoire de la domination Française en Orient*. Good illustrations have been derived from contemporary MSS. in the possession of the eminent publisher Ambroise Firmin Didot.

Villehardouin received from the Emperor Henri the city of Messinople (Mosynopolis, see p. xxi), in Thrace, and he died there about 1213. His heirs ruled important principalities in Greece for nearly two centuries, and we should have been glad if the editor had given us a pedigree of the family. But the attempt to plant French kingdoms in the East and make the Mediterranean as it were a French lake failed; and perhaps the most enduring result of the Latin conquest lies in the romances from which "Duke" Theseus passed into Chaucer's "Knight's Tale," and Shakspere's *Midsummer Night's Dream*; and in these Chronicles of the Crusades by Villehardouin and Joinville, which have been the delight of many successive generations. Villehardouin has no central figure, round which all else is grouped, like the Saint Louis of Joinville; but the greatness of the tragic event which he describes needs no such interest to heighten its effect—the ruin of the last home of the ancient literature and civilisation, "Graecia Barbariae lento collisa duello." The modern names contrast with the ancient in almost every page. It sounds strange to hear the Black Sea called "la mer de Rossie," though we know that the Russians had

repeatedly attacked Constantinople. Of our own countrymen in the famous Varangian Guard, 'the English armed with battle-axes,' we hear that they repelled the first Venetian attack, but the cowardice of the Emperor made their efforts of no avail. To make his work as complete as possible the editor has added an extract from the compilation of Baudouin d'Avesnes, which may possibly give us a lost part of Henri de Valenciennes, describing the death of the Emperor Henri and the subsequent events. We cannot but give the highest praise for these excellent editions to M. de Wailly, who has been worthily supported by M. Didot.

C. W. BOASE.

Contents of the Journals.

Von Raumer's *historisches Taschenbuch*, herausgegeben von H. Riehl, 1873, contains six essays. The first gives Mack's defence of the Capitulation of Ulm on his trial for high treason, of much interest just now when a similar trial is going on as to the surrender of Metz.—Weber analyses Rabelais' great work as illustrating the period of transition between two Ages.—Dahn's account of the growth of the kingly power in the early German States may be compared with Freeman's in the first volume of the *Norman Conquest*.—Henke (the church historian, who has just died) contributes a biography of Théodore Agrippa d'Aubigné, the firm friend of Henri IV., who was yet opposed to so much of the great king's policy.—Liliencron's essay on the Emperor Maximilian's *Der Weisskünig* ("The White King," not "the wise") is especially good. Maximilian first wrote his allegorical poem *Der Theuerdank*, in which the hero goes through many adventures in his journey to woo Lady Honour (in whom Mary of Burgundy is to a certain extent personified), and then meant to describe in prose, in "The White King," his own actual campaigns (each king being described by the colour of arms, &c., the English being called "the red-white king" clearly gives the union of the red and white rose), to conclude as he hoped with a crusade against the Turks, but this never came to pass, and the prose work has no conclusion.—Lastly Uhde gives some amusing selections from the autobiography of Caroline Schulze, an actress of the last century, whose rivalry with another actress at Hamburg led to the events which occasioned Lessing to write the *Dramaturgie*, and who at Leipzig charmed Goethe in his schoolboy days. This year's volume is particularly interesting.

Von Sybel's *historische Zeitschrift*, drittes Heft, 1873.—Waitz discusses the best mode of continuing the *Monumenta Germaniae Historica*.—Kaufmann criticises the extant accounts of Clovis' decisive victory at Vouglé (507).—Reimann reviews Sickel's excellent history of the Council of Trent, laying stress on the way in which the Catholic powers were finally induced to accept the continuance of the former Council instead of having a new Council summoned which the Protestants might attend.—Schmoller describes the administration of East Prussia under Frederic William I., who made the authority of the State once more supreme over the obstructive local privileges and privileged classes. English readers may compare his account with Carlyle's. Schmoller rightly points out the King's real services: his experiments in political economy were far from beneficial.—Lehmann analyses the French accounts of the Campaign of Sedan, proving that it was really Bazaine's despatch of Aug. 19, announcing his intention to break out of Metz, which induced MacMahon to give up his plan of retiring on Paris and undertake the disastrous march to Sedan.—Nissen reviews Freeman's second series of Historical Essays, especially criticising his account of Mommsen and other German historians. A number of the local histories and documentary collections relating to Mecklenburg, Saxony, Basle, Nuremberg, are briefly noticed, and an abstract given of vol. iii. of Amari's excellent *Storia dei Musulmani di Sicilia*.

Literarisches Centralblatt, July 26, reviews Suchier, *über die Quelle Ulrichs von dem Türlin* (already noticed in the *Academy*).—Aug. 2 reviews Waitz, *die Formeln der deutschen Königs- und der römischen Kaiser-Krönung*, and Ignazio Senti's excellent *Elementi di bibliografia* (Verona, 1872).—Aug. 9 praises Gaston Paris' defence of the genuineness of Gunther's Latin poem *Ligurinus*, but points out freely the defects of the *Monumenta historicae Danicae*.—Aug. 16 reviews in detail Schuster's valuable rearrangement of the Fragments of Heraclitus, and praises Otto Mejer's *zur Geschichte der römisch-deutschen Frage* for the information it contains as to the great question now pending between Church and State; Giesebrecht's *Arnold von Brescia* is noticed as proving that the *Historia Pontificalis* was written by John of Salisbury, who thus enables us to check the account given by Bishop Otto of Frisingen.—Aug. 23 criticises Beulé's account of the Emperor Tiberius.—Aug. 30 notices Maassen's *eine Rede des Papstes Hadrian II. (869)*, the first thoroughgoing attempt to base the Papal Supremacy on the Forged Decretals; and Eberhard's *Fabulae Romanenses Graece conscriptae*.—Sep. 6 gives an account of the new edition of Spruner's admirable

Handatlas für die Geschichte des Mittelalters und der neueren Zeit, and of Eitelberger v. Edelberg's *Quellenschriften für Kunstgeschichte und Kunsttechnik des Mittelalters und der Renaissance* iv.—Sept. 13 notices Susemihl's new edition of Aristotle's *Politics*, Wagner's edition of the Greek poem on Belisarius from the Vienna MS., and Redtenbacher's *Beiträge zur Kenntniss der Architektur des Mittelalters in Deutschland*.

New Publications.

- ALLEN, C. F. De tre nordiske Riges Historie under Kong Hans, Christiern den Anden, Frederik den Forste, Gustav Vasa, Grevefeiden 1497-1536. V^e Bind. Kjøbenhavn. Leipzig: Brockhaus.
- BAYER, K. Churfürst Friedrich V. 1 Abth. Schweinfurt: Giegler.
- BESTUSHEW-RJUMIN. Geschichte Russlands. Uebers. v. Th. Schiemann. 1 Bd. 1 Lfg. Mitau: Behre.
- CLÉMENT, P. Histoire de Colbert et de son administration. Paris: Didier.
- COHN, M. Zum römischen Vereinsrecht. Abhandlungen aus der Rechtsgeschichte. Berlin: Weidmann.
- CURTIVS, E. History of Greece. Vol. v. (completing the work). Translated by H. M. Ward. Bentley.
- DEVIC, Cl., et J. VAISSETE. Histoire générale du Languedoc, avec des notes et les pièces justificatives. Édition accompagnée de dissertations et notes nouvelles. T. 1^{re} (1^{re} partie), t. 3, et t. 4 (1^{re} partie). Paris: Picard.
- EWALD, A. C. Our Public Records: a brief Handbook to the National Archives. Pickering.
- FERRIÈRE, H. de la. La Normandie à l'étranger. Documents inédits relatifs à l'histoire de Normandie tirés des archives étrangères. xvi^e et xvii^e siècles. Paris: Aubry.
- HARSTER, W. Die Nationen d. Römerreiches in den Heeren der Kaiser. Speier: Neidhard.
- HERRIG, H. Kaiser Friedrich der Rothbart. Berlin: Allgemeine deutsche Verlags-Anstalt.
- HODSON, G. H., and E. FORD. A History of Enfield, in the County of Middlesex. Enfield: Meyers.
- HOUSSEY, H. Histoire d'Alcibiade et de la république athénienne depuis la mort de Périclès jusqu'à l'avènement des trente tyrans. Paris: Didier.
- INDEX EXPURGATORIUS ANGLICANUS; or, a Descriptive Catalogue of the Principal Books, printed or published in England, which have been suppressed or burnt by the common Hangman, &c. J. Russell Smith.
- KITCHIN, G. W. A History of France down to the year 1453. (Clarendon.) Macmillan.
- LIEBUSCH, G. Elisabeth v. Dänemark, Kurfürstin v. Brandenburg. Berlin: Heinersdorff.
- MOREAU, M. Histoire de l'Académie française de 1598 à 1755. Paris: Techener.
- MÜLLER, P. L. Wilhelm III. von Oranien, und Georg Friedrich von Waldeck. 1 Band. 1679-1684. Haag: Nijhoff.
- NIESE, B. Der homerische Schiffskatalog als historische Quelle betrachtet. Kiel: Schröder.
- PALM, K. Italienische Ereignisse in den ersten Jahren Karl IV. Göttingen: Peppmüller.
- PLITT, G. Die Apologie der Augustana geschichtlich erklärt. Erlangen: Deichert.
- QUITZMANN, E. A. Die älteste Geschichte der Baiern bis zum J. 911. Braunschweig: Wreden.
- RACCOLTA di leggi ed ordinanze della monarchia austriaca. Vol. ix. Fasc. 1. Innsbruck: Wagner.
- REGESTA pontificum Romanorum inde ab a. post Christum natum 1598 ad a. 1804. Ed. A. Potthast. Fasc. iv. Berlin: v. Decker.
- RELIQUIAE tabularum terrae regni Bohemiae anno 1541 igne consumptarum. Ed. J. Emler. Tom. ii. Vol. 2. Prag: Greg. & Dattel.
- ROLLS OFFICE CHRONICLES. Year-books of the Reign of King Edward the First, years xxi. and xxii. Edited and translated by H. T. Horwood. Longmans.
- SAUTAYRA et CHERBONNEAU. Droit musulman. Du Statut personnel et des successions. T. i. Du Statut personnel. Paris: Maisonneuve.
- SCHIEEMANN, Th. Regesten verlorener Urkunden aus dem alten livländischen Ordensarchiv. Mitau: Behre.
- SCHOELL, R. Quaestiones fiscales juris attici ex Lysiae orationibus illustratae. Berlin: Weidmann.
- SKENE, W. F. Fordun's Chronicle of the Scottish Nation. With English translation, introduction, and notes. Edmonston and Douglas.
- STÄLIN, C. F. v. Württembergische Geschichte. 4 Thl. 2 Abth. Stuttgart: Cotta.
- STEENSTRUP, J. C. H. R. Studier over Kong Valdemars Jordebog. 1. Kjøbenhavn: Klein.
- TABULAE photographae xi., materiam palaeographicam aetatis imperatoriae exhibentes, compositae a M. Munier. Mainz: Diemer.
- WALLON, H. La Terreur; études critiques sur l'histoire de la Révolution française. Paris: Hachette.
- WUNDERLICH, E. R. Fénelon, Erzbischof v. Cambrai. Hamburg: Agentur des Rauhen Hauses.

Philology.

Comparative Grammar of the Modern Aryan Languages of India, to wit, Hindi, Panjabi, Sindhi, Gujarati, Marathi, Oriya, and Bangali. By John Beames, Bengali Civil Service, Fellow of the University of Calcutta. Vol. I. On Sounds. London: Trübner & Co. (xvi. 360 pp. 8.)

THE present work of Mr. Beames fills up a considerable gap in our knowledge of the seven principal modern languages of India, particularly felt by every one who takes an interest in the old Prākṛits. In a field like this, where little has been done and much remains to be done, it is but natural that there should be several weak points in Mr. Beames' *Grammar*; but nobody who has an idea of the many difficulties connected with these studies will blame him for this. Though Mr. Beames, in a note to p. 9, rightly remarks that the subject of Prākṛit is quite secondary throughout the work, still the connection between ancient and modern Prākṛit is after all far too close not to force us constantly to recur to the former. Mr. Beames has a fair knowledge of Vararuchi's *Grammar*, and is well versed in the works of Professors Höfer, Lassen, and Weber; but Pāli and the Prākṛits of the plays, especially the lower dialects, he has hardly taken into consideration. This is a real defect in his work and the source of numerous errors. Thus on p. 22 he asserts that "in point of development we do not get lower down than about the first century of our era," and hence he maintains that the nine centuries till Chand Bardai will probably remain for ever a sealed book. I confess that his reasoning is utterly unintelligible to me. I cannot see why we should fix the first century in particular as a line of demarcation. If Mr. Beames, instead of constantly making his references to the *Hāla* and the *Bhagavatī*, had examined the various dialects of the Mṛichchhakatikā, the Apabhraṃṣa songs of the fourth act of the *Urvuṣṭi*, and the Apabhraṃṣa of Pingala, the gap would not have seemed to him so very wide. These last two dialects have already lost much of their old synthetical construction, their flexion is in a state of complete decay, and in many respects they form the missing link between the Çaurasenī and the vernaculars. Mr. Beames strongly denies that the Prākṛit of the *Hāla* was ever spoken or has given rise to any of the modern languages. I fully agree with him. Tradition nowhere says that *this* Mahārāshṭrī was ever a spoken language; on the contrary, wherever it is mentioned it is expressly stated to have been a poetical language only. The commentator of the Mṛichchhakatikā, p. v., ed. Stenzler, most decidedly says: "māhārāshṭryādayaḥ kāvya eva prajuyante" (the Mahārāshṭrī and the others are used in poems only). In the plays the Mahārāshṭrī is restricted to the songs. It is due to an oversight that Mr. Beames, at p. 7, asserts that ladies of high rank speak Mahārāshṭrī. Their songs are composed in Mahārāshṭrī, but their speech is Çaurasenī. All the gāthās of the dramas are written in exactly the same Prākṛit as the gāthās of the *Saptaśatī*, but as soon as persons begin to speak, the language used is Çaurasenī or any other dialect but Mahārāshṭrī. In the *Mudrārākṣha* (ed. Calc. 1871) Virādhagupta disguised as a snake-charmer introduces himself as a Prākṛit poet; in the beginning of the second act, p. 57 sq., he speaks Çaurasenī, but the gāthā on the leaf he presents to Rākṣha is pure Mahārāshṭrī. The same is the case in all other dramas, and hereby it is proved that *this* Mahārāshṭrī certainly never was a spoken language. Indeed if we adopt the view that the Prākṛits are as old as the Vedic language, and again admit that *this* Mahārāshṭrī represents one of the oldest forms of Aryan speech, we are driven to the conclusion that our Indian ancestors after doffing monkeyhood began to speak in verse. Next comes the question as to the Çaurasenī. Of this interesting dialect very erroneous opinions are afloat. Mr. Beames does not take any notice

of the twelfth section of Vararuchi, and by scenic Prākṛit he means apparently the Mahārāshṭrī. Yet there is a great difference, and Vararuchi's sweeping rule (xii. 32), *çesham mahārāshṭrīvat*, is open to much controversy. The remarkable sūtra xii. 3, which corresponds to Hemachandra's sūtras iv. 260 and 267, is fully borne out by all critical editions based upon good MSS., and at once separates the Çaurasenī from the Mahārāshṭrī. The assertion at p. 201 that elision is the rule in Prākṛit does not hold good for the lower dialects, which on the contrary show a strong tendency to retain some of the consonants; and since Çaurasenī, and not Mahārāshṭrī, is the principal dialect of the plays, statements such as those at pp. 196, 198, 205, 222, are perfectly erroneous. The Çaurasenī represents in many respects by far an older stage of development than the Mahārāshṭrī of the *Hāla*, which is artificially trimmed up by the poets with some archaic remnants and interwoven with some good old Aryan words to make it look a little more respectable, but on the whole is truly described by Mr. Beames (p. 223) as "emasculated stuff." The Çaurasenī was never a spoken language either; all we can say is that it was the prose of the poets. Mr. Muir is of opinion that the Prākṛits such as we see them in the plays must have approached closely to some form of spoken language, "because they have been used on the stage and therefore must have been intelligible" (*Sanskrit Texts*, ii. 31, ann. 66). The argument is not conclusive. We should be obliged to suppose that even Sanskrit was still intelligible to the people, as there is generally more of Sanskrit than of Prākṛit in the plays. Nor are we anywhere told that the plays which have come down to us were ever popular. The *Ratnāvalī* is stated to have been performed before an assembly of kings; in the *Mālatīmādhava* the manager addresses the "āryavidagdhamiṣṭhā bhagavanto bhūmidevāḥ cha," and in many other dramas he addresses the "āryamiṣṭhās." Hence it is clear that these plays were performed before a select auditory. Now Rāmatarakavāgiṇi in a well-known passage quoted again by Mr. Muir (*Sansk. T.*, ii. 46) styles Apabhraṃṣa all the provincial languages, which are not used in the dramas, such as Bangālī, Gujarātī, &c., and he remarks that the four vibhāshās, "though characterized by apabhraṃṣatā, are not to be ranked in the class of Apabhraṃṣās, if employed in the dramas." Daṇḍin (*Kāvyaadarṣa*, i. 36) says: "çāstreshu saṃskṛitād anyad apabhraṃṣatayoditam"; "in grammars whatever differs from Sanskrit is called Apabhraṃṣa". Ravikara in his commentary on Pingala quotes the following verses (*Urvuṣṭi*, ed. Bollensen, p. 509): "deçabhāshām tathā kechid apabhraṃṣam vidur budhāḥ | saṃskṛite prākṛite vāpi rūpasūtrānurodhataḥ | apabhraṃṣaḥ sa vijñeyo bhāshāyām yatra laukiki," i.e. the learned know that Apabhraṃṣa is the language of the (different) countries; since there is in Sanskrit or Prākṛit a regard for the rules on forms, it must be known that that is Apabhraṃṣa, where there is in the speech the ordinary (colloquial) form. And again Daṇḍin says (l. i. i., 35) "çaurasenī cha gauḍī cha lāṭī chānyā cha tādṛiṇī | yāti prākṛitam ity evaṃ vyavahareshu sannidhiṃ." This is the true reading of the passage as given by Tarkavāgiṇi and means: "The Çaurasenī, the Gauḍī, the Lāṭī, and such like dialects become similar (scil. to the Mahārāshṭrī, i. 34) in dialogues under the name of Prākṛit."

Tarkavāgiṇi rightly explains "yāti" by "kavibhir niveçyate" (is made by the poets). From these passages, and numerous others which want of space forbids me to quote, it is clear that there was a popular speech which was not identical with either Sanskrit or Prākṛit, that this popular speech was called Apabhraṃṣa, and that deçabhāshā and apabhraṃṣabhāshā are only two terms for the same language, that these Apabhraṃṣās were turned to account by the poets and then called Prākṛit. What we are accustomed to call Prākṛits are only poetical

fictions ; instead of speaking of modern Prākṛits, we ought to speak of modern Apabhraṃṣās ; for our vernaculars are the daughters of these old Apabhraṃṣās, and not of the so-called old Prākṛits. The Mahārāshṭrī of the *Hāla* is the Mahārāshṭra Prākṛit, i.e. the language of the Mahārāshṭra poets ; but besides this there was a Mahārāshṭra Apabhraṃṣa, i.e. the language of the Mahārāshṭra people ; and this in its youngest shape is the modern Marathi. The Çauraseni of the plays is the language of the Çaurasena poets, the Çaurasena Prākṛit ; the language of the Çaurasena people was the Çaurasena Apabhraṃṣa, i.e. our Gujarātī. In the *Mahābhāṣya*, as quoted by Mr. Muir (l.c. p. 154) occurs the following passage: "ekaikasya hi çabdasya bahavo 'pabhraṃṣāḥ | tad yathā 'gaur' ity asya çabdasya 'gāvi' 'goṇi' 'gota' 'gopotalikā' ity evam ādayo bahavo 'pabhraṃṣāḥ." Two of these words, gāvi and goṇi (or at least gono), are good Pāli words, cfr. Childers s. v. ; goṇa is found in the *Mṛichchhakatikā*, in the Māgadha Prākṛit, and *Trivikrama*, i. 3, 109 and ii. 1, 30, mentions both amongst other deççābdās. Pāli is the Māgadha Apabhraṃṣa ; the Māgadhi of the plays is the Māgadha Prākṛit. The three languages which the Rīgveda, i. 164, 45, declares to be "hidden in secret" are the Vedic language, Samskrit, and Prākṛit ; the fourth "uttered by men" is the Apabhraṃṣa. If this be true, it is clear that there must have been a closer connection between the ancient Apabhraṃṣās and the modern ones. The rules laid down by Kramadīçvara (Lassen : *Institutiones Prācriticæ*, p. 449 sq.) are too corrupt to afford much aid in proving this ; but *Trivikrama*, the author of a most valuable Prākṛit grammar, treats of the Apabhraṃṣa in two pādās of considerable length. The MS. is written in the Grantha character, and belongs to the Burnell collection, No. 84. In iii. 3, 2 we find the following rule together with its commentary : || acho 'stavo 'khau kakhatathapaphā gaghadadhababhān || apabhraṃṣa ity anuvartate | apabhraṃṣe acha pare astava asamyuktā akhau anādaū vartamānāḥ ka kha ta tha pa pha ete varṇā gha da dha ba bha ity etān prāyo yathāsamkhyam āpadyante. | From this sūtra it follows that as a rule there is no elision in the Apabhraṃṣa ; the tenues are softened into the mediae, just as is the case in the vernaculars. It would be out of place here to go into further details. I hope I have shown that a study of the Apabhraṃṣa dialects would have furnished Mr. Beames with much more valuable material than the Prākṛit of the *Saptāçatī* and even that of the *Bhagavatī*. Mr. Beames touches several times on the important question whether we have to write *v* or *b* in Prākṛit (pp. 199, 203, 251, 252, 325). This question is finally settled by the Dravidian MSS., which have distinct signs for *v* and *b*. They always write *v* and never *b* in the place of a Sanskrit *ṣ*. The *Trivikramavṛitti*, which, as I have mentioned above, is written in the Grantha character, has the rule po vaḥ corresponding to Vararuchi's, ii. 15, and so has the Prākṛita-māñjarī a commentary on Vararuchi written in the Malayālam character. It must however be borne in mind that this holds good only for *v* when originated from *ṣ* and for *b* in the middle of a word. In the beginning of a word *b* remains unaltered. *Trivikrama*, i. 3, 62, has a rule which corresponds to Hemachandra's, as given by Mr. Cowell, Vararuchi p. xiv. : || bo vaḥ || asamyuktasyānādaū sthitasyāchaḥ parasya bakārasya vakāro bhavati | çābalaḥ savalo | alābuh alāvū alāū | Mr. Beames is therefore right in every respect. The Apabhraṃṣa again stands out in strong relief, being the only dialect which changes *ṣ* into *b*. The latter change apparently is the older, *v* being a softening of *b*. Mr. Beames is not very much inclined to admit of a strong Dravidian influence on the vernaculars. I am afraid that he goes much too far in this respect. A study of the Prākṛit works written in Dravidian characters proves that the Dravidians have introduced their

peculiar pronunciation even into the literary Prākṛit. Connected with this aversion to Dravidian influence is Mr. Beames' opinion on the cerebrals, which he considers more original than the dentals (pp. 219-247). The simple fact that the older an Apabhraṃṣa or Prākṛit dialect is the less frequently it employs cerebrals, seems to me to be against this theory. For the same reason I cannot adopt the view that the change of a Sanskrit *ksha* into a Prākṛit *cha* is older than that into a *kkha* (pp. 309-313). In many cases *ksha* has been changed into *cha* by the influence of a following *ya*. On the other hand Mr. Beames is certainly right in his opinion on *kkh* (pp. 305, 306). We hope that Mr. Beames may find sufficient time to complete his work. Such as it is now, it is already a most valuable and important book, and a new proof of its author's indefatigable zeal, sound judgment, and good knowledge of the vernaculars. R. PISCHEL

Vie et Sentences de Secundus, d'après divers manuscrits orientaux les analogies de ce livre avec les ouvrages Gnostiques. Par M. E. Revillout. Paris : Imprimerie Nationale.

THE Greek text containing the story of Secundus, the "silent philosopher," and the replies which he made in writing to the Emperor Adrian is most accessible to classical scholars in the collections of Orelli and Mullach. Orelli speaks of it as "opusculum inepti hominis et plane barbari," and critical historians of philosophy look upon it as wholly worthless for their purposes. That the story, however, has enjoyed an extensive popularity is quite certain. There are several Latin versions or abridgments of it. It was well known in the Middle Ages through a translation incorporated into the *Speculum Historicum* of Vincent of Beauvais, and it is also found inserted in the chronicles of Roger of Hoveden. Some fragments of a Syriac text have been published in Sachau's *Inedita Syriaca*, and M. Revillout speaks of at least four Aethiopic and six Arabic texts ; all of which he intends to publish. There is a considerable difference between the eastern and western versions of the story, and M. Revillout's essay is intended to point out the relations which they bear to each other. He considers the Greek as a mere "abrégé informe fait par un traducteur maladroit et lubrique," the original of it being an eastern and Semitic text, of which the Arabic is in general a more faithful representative than the Syriac. The Latin texts are derived from the Greek, but contain some passages to which the eastern recensions bear witness but which the Greek has omitted. The Aethiopic version closely follows the Arabic. None of the existing texts however can establish its claim to be the original ; the combined evidence, according to M. Revillout, rather pointing to a primitive text now lost, and containing a philosophical and religious doctrine closely allied to Gnosticism. M. Revillout calls his essay a "première étude sur le mouvement des esprits dans les premiers siècles de notre ère."

Until we can actually compare the eastern texts of which M. Revillout promises the publication, it would be imprudent to pass a definite judgment on the entire question which he has raised. Meanwhile, with all due deference to the extensive and genuine erudition which these pages display, I cannot but venture to dissent from some of M. Revillout's assertions, arguments, and conclusions. Far from expecting to gain any illustration of the religious or philosophical ideas current in the first ages of Christianity, I am utterly at a loss for evidence as to the antiquity of the story of Secundus. The earliest document connected with it is the Syrian MS. containing the fragments published by Dr. Sachau, and that is of the ninth century. The Arabic text (whatever be the date of its original) can surely lay no

claim to antiquity, and it is from it, according to M. Revillout, that the Aethiopic text is derived. The Greek text, as he shows, bears distinct evidence of belonging to the times of the "Bas Empire." Nor can I discover the least dogmatical evidence of such an antiquity as he claims for it. The so-called philosophical ideas which M. Revillout thinks ancient are not peculiar to the earlier ages of Christianity, but are found in the writings of sophists and rhetoricians of a much more recent period. And if, as he justly says when speaking of the Greek text, "le reste du livre est pour ainsi dire daté par l'emploi du mot *metaton*," the Arabic version of the story contains distinct evidence which is not less fatal to its pretensions.

This evidence is to be found in the apologue with which Secundus excused his mother to the emperor Adrian. M. Revillout considers this as an essential and inseparable part of the story, and even finds traces of it in the Greek text, though by its omission "l'abbreviateur grec a fait preuve ici comme partout d'une ineptie rare." Of the apologue itself he says "Combien tout ceci est oriental ! comme on se sent bien dans un milieu vraiment sémitique !" Oriental it certainly is, but with the exception of a slight biblical colouring which has been interpolated, it is quite as certainly not Semitic. It is simply borrowed from one of the tales of the *Book of Sindbad*, a work which, like *Kalilah and Dimnah*, most probably passed, from the Sanskrit through Pehlevi into Syriac and Arabic, and became known to the western world at the time of the Crusades. We have it in the Hebrew *Mishle Sendabar*, in the Greek collection bearing the name of Syntipas, and in the *Tales of the Seven Vizirs* often incorporated with the Arabic collection of the *Thousand and One Nights*. M. Revillout has in fact been looking out in a wrong direction, instead of following out the hint conveyed in the little note communicated by M. Defrémery—"Un récit analogue se rencontre dans le roman grec de Syntipas." The "récit" is not merely analogous, it is, *mutatis mutandis*, simply identical. And not only has it been borrowed as completely as any story has ever been borrowed from one novelist by another ; it is intended to supply very much the same place in the latter narrative that it filled in the more ancient one. Secundus breaks his long silence, at least in writing, with this apologue for the purpose of removing the blame from his mother and imputing it to destiny, just as the young prince in the Indian tale breaks his silence with the same apologue, the moral of which he applies to his own case. The biblical quotation is a mere adaptation employed by the Jewish or Christian plagiarist, just as in another tale of Syntipas the young prince invokes Christ, whilst the Arabic version makes him invoke Mohammed. Now the eastern text from which the Greek Syntipas is derived was certainly not known in western Asia any more than in Europe till a date quite as recent as the unfortunate word *μετάτον*, which M. Revillout considers conclusive against the antiquity of the Greek text.

The "unité frappante de texture et de doctrines dans l'ouvrage entier"—"un roman lancé d'un seul jet, où une partie en appelle une autre, où les détails biographiques conduisent à des théories quintessenciées"—is then a mere illusion, except indeed as far as materials of different nature and origin have been more or less adroitly pieced together. All the different parts of the story may, like the "épisode inséparable" just referred to, have been derived from Indian sources, or details of western origin may have been combined with eastern fictions. Arguments are easily found in favour of either hypothesis, but they preponderate, I believe, in favour of the latter. M. Revillout has not made out his case that the Greek recension "est certainement le reflet d'un texte écrit dans une langue orientale." I cannot admit,

for instance, that *ἱερατικὴ βιβλιοθήκη* is evidence of translation from the Arabic. The Arabic is just as likely to be translated from the Greek, either directly or through the Syriac. Nor can I, without forgetting Lucian and Apuleius, not to mention other authorities, see why the scene between Secundus and his mother is only conceivable "dans un intérieur oriental." Secundus may have brought letters of recommendation, just as Lucius did to his Thessalian host. M. Revillout is, in fact, very unfair to the Greek recension. He talks of "peintures lubriques et détails obscènes." This is surely mere exaggeration. One of the expressions which shock him greatly is *τοῖς ὀφθαλμοῖς περιλάμπων*. But the passage is manifestly corrupt, and certainly not to be understood as M. Revillout understands it. The narrator has no intention of representing Secundus as animated with impure ideas. The Latin text in one of the manuscripts (*Cod. Burn.* 360) of the British Museum reads—"Ille velut propriam matrem amplexus et osculis placans." *Osculis* is no doubt a mistake for *oculis*, but *placans* implies a Greek original different from *περιλάμπων*.

The philosophical rubbish attributed to Secundus in the western recension is quite worthy of the sophists of the lower empire. It has been improved upon in the Arabic recension, and spun out to suit the taste of those, for instance, who read Hermes Trismegistus in Arabic or the *Mystical Philosophy* attributed to Aristotle but derived in fact from Alexandrian sources. That many points of analogy may be discovered between these philosophies and the various forms of Gnosticism is natural enough, the later Greek philosophy being the source both of Gnosticism and of Arabic speculation, as it also was of Sufism. But a work in which the theory of fatalism or providence is directly derived from an Indian book is eminently unfitted to illustrate the Gnosticism of church history. Gnosticism is a plant of western growth. During the first ages of Christianity no interchange of ideas between the philosophies of Europe and India is historically demonstrable or even probable. The hypothesis of an eastern origin for the philosophies of Philo and Plotinus or for such phenomena as Essenism has long been exploded. That Buddhism had anything to do with the rise or progress of Gnosticism or Manicheism is equally untenable.* This hypothesis was only possible at a time when very inaccurate ideas prevailed as to the nature of Buddhism. The more or less apparent coincidences between eastern and western thought are absolutely independent of each other. But in the middle of the sixth century after Christ the great Khosru is said to have encouraged the translation into Persian of the most important productions both of Sanskrit and of Greek literature. From this time Indian fables and other tales gradually made their way into western countries ; the religious or philosophical ideas which they expressed being more or less modified by Jewish, Christian, or Mohammedan translators and imitators.

It is only then from a literary or from a philological point of view that the story of Secundus, as represented by the Arabic and Aethiopic versions, can have any interest for us. It is utterly untrustworthy as a guide to the course of thought in the early ages of Christianity, and it is also quite undeserving of that expenditure of erudition which M. Revillout has lavished upon it by way of illustration. But the erudition is valuable for its own sake, and although I do not admit M. Revillout's theory of Gnosticism I have no hesitation in

* I have endeavoured to show this in detail, in an article on "Orientalism and Ancient Christianity" in the *Home and Foreign Review* of 1863, which also contains remarks on the origin of Kabbalism at variance with the views of M. Franck, M. Revillout's principal authority on the subject.

expressing the interest and admiration which the perusal of his essay has awakened in me. All Coptic scholars will carefully take note of his remarks on the grammatical blunders in the translation of the *Pistis Sophia*, and will, I am sure, agree with me in rejoicing at the prospect of a careful edition of the three Coptic treatises (p. 70) still remaining in manuscript at Oxford.

P. LE PAGE RENOUF.

Notes and Intelligence.

The extensive library of the late Sir John Bowring is to be sold by auction. A very important Chinese work, however, has been presented to the Royal Asiatic Society, in accordance with Sir John's wishes, viz. the great standard Chinese dictionary, entitled *Tse-tien*, compiled, by order of the Emperor Kang-he, by some thirty Chinese savans. The work consists of about 120 volumes.

Basque scholars will be interested to learn that the Basque-French Dictionary of M. van Eijs will soon make its appearance. For the first time they will have a trustworthy and scientific lexicon of the language in their hands. M. van Eijs has attempted to do for Basque what Fick has done for Aryan by the application of the comparative method, and has thus been able to recover many old roots and to explain many obscure forms. The work will be accompanied by a valuable introduction.

Among the other treasures brought back from Assyria by Mr. George Smith is a small fragment which fits on to the *fasti* tablet published in *W. A. I.* ii. 52, 1. It definitely settles the disputed question as to the reign of a Shalmaneser between Tiglath-Pileser and Sargon. Tiglath-Pileser, we find, in his last year "took the hands of Bel" a second time. Then comes the dividing line and the statement of Shalmaneser's accession to the throne. According to the next line, the king remained at home during the eponymy of the Prefect of Amida, but the three following years were occupied in campaigns against a country or countries the names of which are unfortunately lost. After this we have the dividing line again and a notice of Sargon's accession.

Dr. Adler, the Chief Rabbi, has in the press a commentary on the Targum of Onkelos.

Mr. Smith will read a paper at the first meeting of the Society of Biblical Archaeology on the new materials he has discovered for reconstructing the history of Babylonia and Assyria. A fragment of a list of the Babylonian dynasties is especially interesting, as it shows that Berosus had native data upon which to base his chronology.

New Publications.

- ANDERSON, J. The Orkneyinga Saga. Edmonston and Douglas.
BRACHET, A. An Etymological Dictionary of the French Language. Translated by G. W. Kitchin. (Clarendon.) Macmillan.
BRILL, B. Ueber dipodische od. tripodische Messung u. ü. die Cäsur d. jamb. Trimeters. Königsberg: akadem. Buchhandlung.
COOK, F. C. The Inscription of Pianchi Mer-amon, King of Egypt in the eighth century B.C. Murray.
COSIJN, P. J. De Oudnederlandse Psalmen. (Haarlem.) Leipzig: Richter und Harrassowitz.
DEN DANSKE RIMKRÖNIKE, trykt ved Gotfred af Ghemen. Kjobenhavn, 1495. Udgivet i fotolithografisk Facsimile af Budtz Müller & Co. og C. Ferslew & Co. i Kjobenhavn. Kjobenhavn. Leipzig: Brockhaus.
FOERSTEMANN, E. Geschichte des deutschen Sprachstammes. Nordhausen: Förstemann.
GENTHE, H. Index Commentationum Sophoclearum ab a. MDCCCXXXVI. editarum triplex. Berlin: Bornträger.
HABRUCKER, F. G. P. Quaestionum Annaeanarum capita iv. Königsberg: akadem. Buchhandlung.
HETTEMA, M. M. de Haan. Idioticon Frisicum. Friesch-Latijnsch-Nederlandsch Woordenboek. Utrecht: Beijers.
LENORMANT, F. Choix de Textes Cunéiformes inédits ou incomplètement publiés jusqu'à ce jour. 1^{er} fascicule. Paris: Maisonneuve.
LENORMANT, F. Lettres assyriologiques, seconde série. Etudes Accadiennes. Tome 1^{er}. 3^e partie. Paris: Maisonneuve.
MIKLOSICH, F. Vergleichende Grammatik der slavischen Sprachen. 4 Bd. Syntax. 5 Lfg. Wien: Braumüller.
THUCYDIDIS Historia belli Peloponnesiaci, ed. Joan. Matth. Stahl. Vol. i. Libr. i.-iv. Leipzig: Tauchnitz.
TREU, M. Der sogenannte Lamprias-catalog der Plutarch-schriften. Berlin: Calvary.

ERRATUM IN No. 81.

Page 371 (A) 22 lines from bottom, for "consideration" read "consideration."

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General Literature.

Searching the Net. A Book of Verses. By J. L. Warren. Strahan and Co.

MR. WARREN has given a decisive proof of the depth and reality of his poetic vocation by a sustained and laborious progress from *Philodetes* to the present volume. We cannot doubt that an impulse which leads an able man to bestow much well directed labour on its gratification is a sufficient justification for itself; perhaps poetry at bottom really requires only two things—an exaltation of feeling sufficiently intense and permanent to call imperiously for literary expression, and an adequate degree of intellectual accomplishment and of imaginative power to make the expression worth communicating and preserving. If these two elements are enough to make a poet, Mr. Warren possesses them in a very high degree: in fact if poets were to be ranked exclusively by the degree in which they possessed these two attributes he would be entitled to rank among the greatest living poets. There is, however, a third attribute which has always been prominent in really distinguished poets, which Mr. Warren seems hardly to have appropriated in the same measure as he has appropriated the two first. That it has escaped, or all but escaped, the researches of such an intelligent and conscientious artist is enough to prove that it is more impalpable than the others; perhaps it may be called imaginative spontaneity. To explain: the exalted feeling which is the fundamental condition of poetic inspiration may be associated either with an ordinary apprehension of ordinary things, not transformed essentially by the imagination, or with an original and unique apprehension of what the imagination has either created or transformed: in the first case the theme of the poem can always be adequately stated in plain prose, however richly the exposition may have been ornamented, or however appropriate the ornaments may be, however vital may be their connection with the mood from which the poem springs; in the second case, though the poem may be simple to the verge of childishness, as some of Blake's are, it is no more possible to describe its motive adequately in prose than to describe the motive of the simplest melody in language.

Perhaps it is just because Mr. Warren's feeling is so strong

and his imagination so copious that he has been content too often to take the theme which was to interpret the one and be adorned by the other ready made from the ordinary furniture of his intellect, instead of caressing his imagination till it transformed an old theme or supplied a new. And this want of purely imaginative spontaneity naturally leads to a want of artistic independence and artistic unity. One cannot say that Mr. Warren is an imitator of Mr. Browning or of Mr. Swinburne, but one cannot say that he is independent of them: the impulse under which he writes is genuine and unborrowed, but for want of a personal ideal to give direction to this impulse the manner in which he writes is too much at the mercy of the reading that he finds congenial. Again, one cannot say that there is an absolute want of arrangement in Mr. Warren's poems, but one cannot say either that they are always in a high degree organic; the admirable paragraphs and stanzas succeed each other always without confusion, but sometimes without cohesion, and when the author thinks he has written long enough he leaves off—in a good place.

The first poem in the present volume, "The Defeat of Glory," might serve alone to illustrate nearly all that has been said. Its 332 lines add literally nothing to the old quatrains at Melrose:—

"Earth goeth on the earth
Glistening with gold;
Earth goeth to the earth
Sooner than it wold.
Earth buildeth on the earth
Palaces and towers;
Earth sayeth to the earth,
All shall be ours."

We might have doubted whether this was worth saying twice, we might have doubted whether it was worth saying at length; but there can be no doubt about the opulent inventive ingenuity with which the writer inflicts this thought upon us in detail through a series of stanzas whose ringing emphasis perhaps owes something to Mr. Swinburne. But after all one feels that, though many of the stanzas are worth having, the self-glorification of the king and the retort of the poet might have come at any point, and the poem would have been only shorter not less complete.

This last criticism does not apply to "A Middle Class Tragedy," where certainly no stanza is superfluous, though

the last reveals more than half the story :

"So, the tale runs, he has ruined my life,
For a week's pastime, it's clear :
He a great nobleman, covets my wife,
Clerk on a hundred a year."

And yet one feels that there is something dry and barren in the exposition of the story of the poor clerk who only saves his stray ewe-lamb to lose her so ; the story is not made to grow and move as it would have been in the hands of Mr. Browning. Somewhat the same remark suggests itself with reference to two poems which, if my memory serves me, have appeared before as choruses in *Orestes*. When one compares the "Ode to the Sun" with Shelley's "Cloud" or invocation to "Night" one thinks that, with more imaginative spontaneity, the poem would have had more sweetness and musical flow ; when one compares "Nemesis" to a chorus of *Atalanta in Calydon* one misses the gathering rush, the rhythmical logic of imaginative passion. Such a comparison can hardly be called invidious ; it implies that Mr. Warren has enough cleverness and cultivation to deserve to be named with Shelley, or at any rate with Mr. Swinburne, if only he can comprehend in time that the imagination ought to be capable of higher functions than that of manufacturing images. Perhaps the best specimen in the volume of what is possible to an author with no other resources than strong feeling endeavouring to become articulate by dint of iteration and emphasis is to be found in the long ballad entitled "Two Old Kings," a sketch after Kaulbach. One leaves off with a feeling of sympathy as well as respect—though Uhland would have moved us more with a quarter of the detail, because Uhland's sentiment, thin as it is, is still spontaneous.

Though Mr. Warren has written two dramatic poems which in many respects are admirable, he has not yet mastered all the conditions of dramatic poetry ; in "Medea," for instance, the relative situation of the speakers has been well conceived at starting, and is eloquently and impressively discussed, but it does not advance or change by means of the discussion, and therefore the fragment is not quite dramatic.

The want of movement is of course less objectionable in analytical poems like "At the Council" and "The Cardinal's Lament," though here too we are conscious of a certain sterility underlying really copious and eager eloquence. In the first the writer tries to enter into the mind of the assembled Fathers of the Vatican, and he can find nothing for them to think but a paraphrase of what the Ultramontane newspapers said at the time. The second, in execution if not in conception, is of a higher character : the writer had materials for an article in the best manner of the *Daily Telegraph* on the dignity and pathos of the helpless, inflexible, indomitable protest of Ultramontanism against modern progress ; but being by temperament a poet rather than a journalist, he has given us not an article in the *Daily Telegraph*, but a soliloquy of a Cardinal, who begins by gloating over the torture of his mistress, who happens to be not a woman, but Rome (in Mr. Swinburne the Pope instead of the Revolution would have been the tormenter), and goes on to argue, with the acuteness if not with the broad suggestiveness of Bishop Blougram, that there can be no Christianity or morality for people who will not take the Pope on his own terms ; it ought to be added that if the Cardinal is less suggestive he is a better preacher, being quite in earnest, and perhaps for that reason easier to follow.

There is however one poem in the volume which seems to supply decisive evidence that Mr. Warren is capable of something very far better in kind than most of the work which he has done hitherto ; it is a serious pity that the author of "Jael" should be satisfied with the laborious accomplishment of translating the ordinary moods and im-

pressions of a cultivated man among the problems of the day into the dialect of more genial poets, though the translation may be forcible enough and finished enough to give it a certain value on the hypothesis that it is worth our while to become articulately conscious of our ordinary selves.

Even in "Jael" the writer gives way too much to the tendency to pay himself with emphasis, and to insist upon the obvious treachery because he can be very eloquent about it, and some rather coarse sneers at "the old shrewing prophetess" almost suggest that he felt the need of revenging himself upon the Bible. It would certainly have conduced to judicial and even dramatic completeness of treatment if he had remembered that Sisera deserved what he got, and that everybody at the time of course thought so. In order to be quite *Hübsch-objectiv* it would have been necessary to keep a natural preoccupation with the problem of woman's rights rather more at arm's length. Still with all these drawbacks it is a very noble poem ; both the motive that led to the deed and the revulsion after it are conceived with unmistakable original imaginative power ; one feels that the author is really animating a conception of his own, not adorning a conception out of the common stock as a superior man-milliner might dress up a lay figure. It is true that a mere intellectual theory of Jael—as a woman with a great store of fitful energy chafing under the tameness of her lot and the mean neutrality of her prudent husband, and so ready to be tempted by a decisive act which would prove to herself and others the importance of her personality, however base it might seem to her own after-judgment—detaches itself a little too sharply from the poem : at least such studies as Karshish and Andrea del Sarto, or even Simeon Stylites, seem to resist this kind of analysis and condensation. But perhaps this is only saying that even in his most admirable poem—and "Jael" is very admirable indeed—Mr. Warren has not quite attained to the *ars celare artem* which depends even more on the intensity and richness of the artistic inspiration than upon the skill with which the artist directs it, and there is reason to hope that if Mr. Warren follows his star he will attain this inspiration : he will certainly be better able than most contemporary poets to give it adequate expression if it comes.

The following extract, though the first paragraph is rather too like Mr. Swinburne, will show the force and brilliance with which the poem is written throughout, a force and brilliance to be found in other poems of the author without such a worthy central conception.

"You see I cannot weep. Does that sound well ?

How many evil women can find tears,
Sinning all day. My one great deed of blood
Outweighs, as Horeb, in the scales of God
Against some petty sand-grains. He sees that,
Insists upon it, keeps it in his books
In plain red flowing letters that endure.
These women have a hundred petty ways
Of sinning feebly. He forgets them all.
They sin as ants or flies. He cannot praise
Or blame such creatures, simply lets them be.

I feel all this alone with my own heart,
The solitude is busy with God's voice
Speaking my sin. I am worn and wearied out,
A mere weak woman, after all is said ;
Searching the intense dark, with sleepless eyes,
Huddled away by the mainpole in the midst,
A curled, crushed thing, a blurred white heap of robes
Moaning at times with wild arms reaching out,
While on my canvass walls the rain-gush comes,
And the ropes scream and tighten in the blast.

So I must watch until my lord return ;
The camp of Israel holds to-night carouse,
And Heber sits at Barak's own right hand ;
Because I have risen against a sleeping man,
And slain him, like a woman. No man slays
After this sort. The craven deed is mine,

Hold thou its honour, Heber; have thy wine,
Among the captains claim the noblest seat,
And revel, if thou hast the heart, till dawn,
Brave at the board and feeble in the field!"

The lines italicised are an instance, and not the most flagrant which might be cited, of a fault of style which the author ought certainly to overcome. At a first reading the style seems as polished as it is strong; on a second we become conscious of jarring phrases just below the surface, as if they had been forced into their place instead of growing there. This fault is at once more common and more painful in the purely lyrical poems. The most characteristic of them are occupied with the question, What can love be to us when we have outlived passion? which is approached in various moods, and often with a delicacy which gives distinction to a fervour which has not attained to clearness. "A Madrigal" in many of its stanzas comes very near to the ideal of airy grace which the poem scarcely attains as a whole. There is rather too much of this sort of thing:

"Since thy lips hunger to pronounce farewell,
And a pale mist makes bitter both our faces,
Tear down the banner on Love's citadel,
Lead up the rabble to his pleasant places."

This is the first stanza of a poem called "A Farewell;" there are others in the same vein. They may all be read with pleasure, but hardly with interest. G. A. SIMCOX.

LITERARY NOTES.

Mr. William Davis' *Songs of a Wayfarer* presented a great deal of undecided promise in various, not to say incompatible directions; his present work, the *Shepherd's Garden* (Sampson Low & Co.), shows he has chosen his line as a continuator of the old English literature of Madrigals of which Marlowe is perhaps the first master and Marvel the last. His first volume seemed suggestive because it was vague, his second may fairly be said to be an advance in simplicity and unity of impression: on the other hand we seem to see more clearly the present limits of the author's power; he has as much depth of feeling as is possible without thought or passion, as much grace as is compatible with the absence of spontaneity or independent invention; perhaps his chief merit is a sweet seriousness and a perfect sincerity. The book may be commended to readers who have not outgrown the taste for honey sometimes slightly flavoured with lemon juice, as where "The Shepherd ridicules the false charms of a Flaunting Beauty."

The author of "Sketches and Essays reprinted from the *Saturday Review*" (Blackwood & Sons) has more gall in his composition. He rails with a good deal of fluency at Private Adventure Schools, whether they submit to rank as Dames' Schools or set up as Seminaries; at the custom, which seems to have annoyed him much, of taking boys and girls to parties; at the helplessness of speakers at country dinners, and the like. The first of these subjects is sufficiently curious to make us glad of the author's information, though we could have dispensed with exaggerations that are meant to be humorous; but most of the rest of the volume would seem empty if it were simply and seriously written; as it is a lively style and plenty of animal spirits, that seem to be genuine if not quite unforced, make it amusing enough. If the writer did not care to reprint the article where he first made the joke about "the dog," he should have suppressed all allusions to it in the article on "Fashionable Scrambles in Country Houses." It is convenient to have some of the small-print articles in the *Saturday* in a book, for it would be tedious to read them regularly.

The posthumous works of Napoleon III. in exile as hitherto published (Sampson Low & Co.) consist of an abridgment of a pamphlet entitled *Principles*, insisting, not without plausibility, not even without some approach to dignity, on the shabby side of the short-sighted revolution of September 4; of some meagre though occasionally pointed annotations on the first half of the Comte de La Chapelle's history of the first three

months of the Franco-Prussian War; and lastly of a short work on the French Army and the War of 1870, of which the first part was published by the Emperor's direction in his lifetime as a pamphlet with the Comte de La Chapelle's name, though his connection with the book was only seeing it through the press. The first part shows that Napoleon III. took a good deal of intelligent pains to press upon his ministers the necessity of reorganising the army, till at last he received assurances which he had the misfortune to accept as satisfactory; but after reading the report of Marshal Landon, which is an admirable series of reasons why not to do it, we see clearly that some energy was needed to accomplish even the little that was done. The second part shows that the result of the campaign was determined by the fact that the Emperor had reckoned on an effective of 385,000 to oppose to a German effective which could not at first exceed 420,000 and was actually 338,000, while the French effective was only 220,000. It may perhaps be thought that in limiting Napoleon III.'s responsibility to this enormous misconception something is done to lighten it, and he made such atonement as he could by submitting patiently to much humiliation which it appears he felt acutely during the last three weeks of his reign.

The *pièces de résistance* are embedded in a great deal of facsimiles and enthusiasm, from which we learn in general that Napoleon III. was eminently qualified to kindle the loyal devotion of the Comte de La Chapelle, in particular that he was of opinion that M. Thiers ought to be supported because he would be an useful stopgap pending a Plébiscite, and that up to his death he was employed on elaborating a fuel-saving stove which awoke the admiration of a practical engineer—and a plan for abolishing the *octroi* without loss to the revenue—in conjunction with an illustrious financier and economist who begs the editor not to mention his name.

It is well known that a large number of the works of Petrarch are still buried in Italian and other libraries. Hr. H. Müller has recently found in the library at Greifswald a manuscript which throws great light on the petty warfare to which the poet-scholar was exposed from his obscurantist foes. It is entitled "Invectiva contra Gallum quendam innominatum sed in dignitate positum," but the subject of the tract is really an Italian, who is only described as Gallus from his residence at the Papal court of Avignon, where he had been Protonotarius fifteen years before the date of the *Invective*.

J. S. C. Welhaven, the founder of modern Norwegian literature, died at Christiania on the 21st of October. He was born in 1807 at Bergen, where he was brought up in a literary clique, led by the poet-bishop, Nordahl Brun, whose purist instincts tinged the whole of his literary life. Welhaven's influence was felt in every stratum of Norwegian society, but his own poetry is of ephemeral interest, mainly. He was not a great poet, but the father and teacher of poets. His critical writings possess more vitality than his verses. For some years he had been shattered by paralysis.

The review in the *Quarterly* of Princess Marie Liechtenstein's *Holland House*, which a note allows us to ascribe without indiscretion to Mr. Hayward, is less a review than a version of the book on a reduced scale, with the moral reflections omitted and a few personal reminiscences and illustrations added; amongst the latter may be reckoned some unpublished (very indifferent) lines of Rogers' on a fine tree in the grounds of Holland House, prophesying its decay, and provoking from Lord Wensleydale the following impromptu:

"I'll bet a thousand pounds, and time will show it,
That this stout tree survives the feeble poet."

The materials collected by Sir James Mackintosh for his projected history of Holland House and the family MSS. have supplied most of what is new to the public in the original work, on which so much pains have been bestowed as to leave comparatively little to be corrected or added by the most competent critic; but readers whose appetite for the best historical gossip is slight may find Mr. Hayward's abridgment enough to satisfy their curiosity.

The *New Quarterly Magazine* (Ward, Lock & Tyler), the

first number of which has just reached us, resembles the monthly magazines in range of subjects rather than the established quarterlies; the first paper, "Travel in Portugal," is interesting from the fact that Portugal is almost unbroken ground to the tourist, while the writer does not disfigure his sufficiently entertaining notes by the most annoying and perhaps the commonest of literary offences, travellers' jocularities. The "Critical Biography of Rabelais" is a well written paper on an always interesting subject, about which it would be impossible to say anything really new without rising far above the natural level of even a good magazine. Perhaps the paper that will attract most attention is "A Spiritualist Séance" of a very impressive kind described by "Dr. C.," a sceptical man of science, who has been "almost persuaded" by the unimpeachable evidence of his own senses. A postscript follows by the gentleman at whose house the *séance* was held, describing the mechanical means by which a table and a confederate were lifted from the ground, the machinery used being concealed by the darkness; the arrangement of mirrors which enabled the conjurors actually to show one of their disembodied spirits; and, perhaps most instructive of all, the conduct of "Miss Johns," a professed medium, who had been cunningly invited to attend the performance, did a little rapping between whiles on her own account, said nothing about the cheating of the host, but was very much frightened by the trick which she did not understand, of showing her the visible phantom outline of her familiar spirit.

It is said that Berthold Auerbach has just completed a new novel, of which the scene is laid in Alsace, during the late war; the title is at present a secret.

The *Allgemeine Zeitung* (Oct. 8) publishes a long analysis of the fragmentary MS. notes of Schiller's projected continuation of *The Robbers*, of which little was previously known except the bare existence of such a project. The writer believes, from the water-mark of the paper and the character of the handwriting (which, with Schiller, varied much at different periods of his life), that it was in 1800 or 1801 that he was occupied with the scheme, though from the number of ghosts amongst the *dramatis personae* and the important part ascribed to *Schicksal* and *Nemesis* in the plot, one might have been inclined to ascribe it to an earlier date. Karl Moor was intended to have given up the idea of surrendering himself to justice, which concludes the familiar play, and after some twenty years of peaceful and beneficent life as "Count Julian" in a strange country, was to become the hero of a fresh drama made up of love, fate, parricide, and a suggestion of incest, ingredients that explain the non-execution of the work and scarcely leave it to be regretted.

Art and Archaeology.

Life of Moscheles. With Selections from his Diaries and Correspondence. By his Wife. 2 Vols. Hurst and Blackett.

IN condensing and editing the extensive autobiographical notes of her late husband, Mrs. Moscheles has well deserved of the history of music in more than one respect; were it only by giving to the numerous pupils and admirers of the celebrated pianist an interesting account of his artistic career and a still more attractive portraiture of his private character. The difficult task involved in the description of a life so closely connected with her own, the widow has solved with the delicate tact of true womanhood. The story is told for the greater part in the words of Moscheles himself, and wherever the editor adds a remark of her own we distinctly recognise an undertone of suppressed feeling, which, however, on no occasion interrupts, but on the contrary gives additional charm to the narrative. The plentiful materials at her disposal, viz., her late husband's letters and memoirs extending from his early youth to almost the last day of his life, Mrs. Moscheles has used with discretion, condensing and cutting out where it seemed required, and

illustrating the story occasionally from the resources of her own memory.

It is not our intention here to define the merits of Moscheles as a creative and executive artist. For a long time his name as a pianist was almost unrivalled both in England and on the continent, and to a great many of the living masters of the instrument the high qualities of Moscheles as a teacher are in fresh remembrance. To coming generations of teachers and pupils the educational advantages of his method will be illustrated by his admirable *Études*.

The private character of Moscheles appears in a most favourable light in the pages of this biography. He was the best of husbands, fathers, and friends, and the generosity of his nature, together with the universal acknowledgment of his talent from the beginning, entirely preserved him from the spirit of envy and petty animosity so common among professionals. To Mendelssohn, for instance, he was attached with the ties of truest friendship and admiration, and in reading Moscheles' letters one is occasionally struck by a faint similarity to those of the great composer. We find in Moscheles the same amiability of temper, the same appreciative openness to new impressions, without however the considerable literary skill and the occasional flavour of Attic salt which have made Mendelssohn's letters almost as popular as his compositions. In Moscheles' nature there was very little of the "Spirit that denies." His bias was altogether of an affirmative kind. He sympathised with, or at least tolerated the most divergent phases of contemporary art, and his censure, wherever applied, is always mild. But on the other hand his enthusiasm scarcely ever exceeds the limits of moderately warm approval. Indeed he was altogether the reverse of a man of extremes; one might call him a musical Halifax, the prototype of a wise and good-natured trimmer. But this ease of access to his personal and artistic nature has proved of the greatest value for Moscheles' biographical notes. It was by this means that he maintained an intercourse of a more or less intimate kind with a great number of interesting men, and was enabled to render their individual features in his memoirs. The list of familiar names we meet with in the pages of Moscheles' biography as personally known to him is of astonishing length and variety. It comprises not only the stars of his own art like Mendelssohn, Weber, Malibran, and Liszt, but also numerous celebrities in the field of politics and literature, in both of which our author felt a lively interest till the very end of his life.

It would be difficult for us to fix upon a specimen of interesting detail amongst the overpowering quantity of valuable anecdotal material contained in these volumes; but for the name of Beethoven, which wherever it appears throws all other things into comparative shade. The relations between our author and Beethoven were of a very friendly kind and greatly to the credit of the former. Their first acquaintance dated as early as 1814, when Moscheles, at that time a young and comparatively unknown musician, was commissioned by a publishing firm at Vienna to arrange the pianoforte score of *Fidelio*. The revise of the proof he used to take to Beethoven for final alterations, and in this way a friendly though slight acquaintance soon arose between the two men. The following anecdote is highly characteristic: "Under the last piece"—Moscheles says—"I had written: '*Fine* with the help of God.' He was not at home when I took it to him, and when he sent it back to me he had written underneath: '*O man, help yourself.*'" More than thirteen years after this Moscheles was to prove his faithful remembrance of the personal attachment so formed. It was partly through his energetic action that the Philharmonic Society of which

Moscheles was at that time a member, on hearing of the dying master's pecuniary difficulties, nobly resolved to render him speedy and liberal assistance. The correspondence relating to this transaction has here been published for the first time *in extenso* and forms an equally valuable and interesting contribution to the history of music.*

No Englishman can read without pride about the feelings of gratitude which the dying lips of Beethoven vainly tried to utter for the liberality of England and its representative musical institution. Nothing can be more impressive than the following homely description of the effect of the welcome news on Beethoven as we read it exhibited in one of Schindler's letters to Moscheles: "Care and sorrow had suddenly disappeared as soon as the money arrived, and he said quite contentedly: 'Now we shall be able sometimes to have a jolly time of it again.' For we had only 340 florins in the strong box, and we had limited ourselves for some time past to beef and vegetables, which pained him more than anything else. The next day, it being Friday, he at once ordered his favourite dishes of fish. In short, his joy at the noble action of the Philharmonic Society was sometimes perfectly childish."

About Moscheles' career we have but little to add. After having established a name as one of the first of living pianists on the continent he settled in England for a number of years, and left that country only to accept the important post of Professor at the Conservatorium of Leipsic, which had just been opened under the auspices of his friend Mendelssohn. His life upon the whole may be called a singularly happy one. The brilliant success of his early youth was more than justified by the deeds of his manhood, and even the course of his declining years, attended as he was by the loving care of the most faithful and congenial of wives, ran happy and undisturbed, as quiet indeed as the following little piece of music, which was composed a few months before his death, and which we will quote in full as a kind of summing up of his career in the language of his own art. It is dated December 6th, 1869, and bears the significant inscription: "Solution is the aim of our earthly existence."

Tempo ad libitum.



The Mural Paintings of Campania. [*Untersuchungen über die Campanische Wandmalerei.*] By Wolfgang Helbig. Leipzig: Breitkopf und Härtel. 1873.

To give an idea of what may be gained by reading a book which seldom runs through a page without conveying some

* Part of the letters referred to had formerly been published in the English translation of Schindler's *Life of Beethoven* by Moscheles (a work now out of print), and have lately been reprinted for private circulation by permission of Mr. Felix Moscheles, the master's surviving son, with the programmes of the Philharmonic Society for 1871.

new facts, or at least presenting old ones in entirely new bearings, is a task which increases in difficulty in proportion as the space for it diminishes. This being very sensibly our case with regard to the book now before us, we must claim a margin for remarks in its favour on many points which it will be necessary to pass over at present.

A foundation for the present work was laid by Mr. Helbig in 1868 by the publication of a catalogue of the mural paintings of Campania (*Wandgemälde Campaniens*: Leipzig; with atlas), to which was prefixed an elaborate inquiry into the technical procedure of ancient painters. For the volume now issued was reserved the examination of those paintings as works of art, their position with reference to contemporary Roman sculpture, and the relation of both to Greek art as it was practised in what is called the Macedonian period, that is during the government of the successors of Alexander. The first chapter is occupied with the evidence for and against the theory that art as practised in Rome during the last century of the Republic and the first century of the Empire was wholly devoid of creative power, being content to reproduce, with trifling varieties of detail, the old types established by the Greek masters. The array of facts in support of the theory is certainly formidable, and the charge of artistic poverty which they convey is the more remarkable because in those days the Roman national legends, with their many new situations and effects, stood in high favour, and presented subjects which at least Virgil and Ovid deemed worthy of their art. To say that the artists then working in Rome were Greeks by birth and education is no sufficient answer to the charge, because, had they possessed the creative faculty, they could hardly have neglected the advantage to be gained from pleasing their patrons by applying it in this direction. The second chapter is devoted to ideal sculpture, the scope of it being to show, by reference to the remains and records of art in Rome on the one hand, and to the remains and records of Greek art on the other, that the artists of Rome produced hardly a new ideal type, and never one of importance. Even a type at first sight so peculiarly Roman as that of Aeneas carrying his father Anchises on his shoulder, which occurs frequently in Roman art, is traced to a Greek model as seen on the coins of Catania in Sicily, on which is represented the story of the Catanian brothers, one of whom turned back to save his father from the burning stream of lava. It is granted that in producing types of the barbarian nations with whom the Romans came in contact, as for example the type of Germania which has been recognised in the statue of Thunselda in the Loggia dei Lanzi at Florence, the artists of Rome achieved considerable success, though here, too, they had been preceded by the school of Pergamus, from which we still possess several figures of Gauls. The third chapter turns on realistic sculpture as seen in portraiture, in the historical representations employed for the decoration of triumphal arches and similar public buildings, and in scenes from daily life. The task here proposed is to show that in these three directions the art of Rome was the natural development of the phase of Greek art which set in during the lifetime of Alexander, and assumed very marked features in the times of his successors. It was simply the last phase of Greek art prolonged and cultivated in foreign countries. Hence the term Hellenistic, which under similar circumstances is applied to the language of Greece, has been employed by Mr. Helbig to designate this phase of its art. Its unusual length of days is to be accounted for by the constant occurrence of fresh subjects for it to handle. The artists of previous stages had been mostly confined to mythological subjects, which though abundant

had ceased to increase, and were therefore exhaustible. With regard to the realism of portraiture for which Roman artists are distinguished, we can see how completely they were anticipated by turning to the portraits on the coins of Alexander's successors; for instance, that of Ptolemy I. with his toothless mouth and furrowed face, the appearance of which suggests that what was true of Lysistratos, a brother of Lysippos, that he took plaster casts of the faces of his subjects, was generally true in the case of other sculptors of portraits in this period. To take an example from sculpture in the round, we may compare the marble portrait head from Priene in the British Museum with the most characteristic of Roman heads. As regards scenes from daily life, the inferior nature of the work renders it very difficult to determine how far the Roman artists may have worked after Greek models. As to historical representations on the other hand, such as those of the arch of Titus and the column of Trajan, it is clear from a large series of monuments and records, for which we must refer to the chapter now before us, first, that Greek art of the Macedonian period, being familiar with subjects precisely of this nature, was suited to form an excellent precedent for Roman artists, and secondly that, to judge from the scanty remains of Greek art which we possess, it actually furnished the Roman artists with several motives of composition. It is interesting, further, to note that the manner of working so as to obtain two or more backgrounds of figures which is characteristic of Roman reliefs is strongly suggestive of the grouping of figures in a picture, and that in the times of the Republic, when Rome came first into conflict with Greece, passing events of moment were represented in Rome by temporary paintings which were probably adapted from Greek models, and at any rate were executed in some cases by Greek artists.

This elaborate preliminary inquiry being concluded, the argument takes up its proper subject, painting as practised in the ancient Campania. What the end of the argument is likely to be, may be forecast from the depressing influence of the opening chapter, in which the scanty records and taunting remarks of Roman writers are arrayed. But these writers judged of the art of their time from a comparison with what they knew of the very bloom of Greek art, and, even if always qualified to judge, were certainly less liberal than we are justified in being. This much, however, is proved with abundance of detail, that the painters working in Italy during the last century of the Republic and the first century of the Empire were as deficient in imagination and creative power as were their brethren of the art of sculpture. The only faculty for which they are entitled to distinction was that which enabled them to throw the freshness and reality of their own times into compositions left ready to hand by the Greek artists of the Macedonian period. But, then, the success with which this faculty was sometimes exercised cannot be estimated with too much admiration. Nor, turning from the subject itself to the manner in which it is dealt with by Mr. Helbig, can we praise too highly his analysis of the ancient paintings which still exist, and the immense erudition which he employs to track out the original models of the Campanian painters among the scattered records of Macedonian art. If in this part of the book one chapter is likely to awaken more interest than another in this country, where scholarship has many and ancient art few devotees, it will probably be that one in which the relation between the Roman poets and their Alexandrian predecessors is discussed very suggestively, if not so fully as might be desired. Similarly adapted to scholarly appreciation is the comparison between the Greek idyllic poetry and the landscape painting of

Campania. But perhaps the vividness of his style is nowhere more attractive, nor incisive remarks more abundant, than where (xvii) he describes the changed social and other circumstances under which art was practised in the Hellenistic period, as compared with the former age of idealism. The conquests of Alexander had opened to the Greek gaze the East gorgeous in its personal attire and equipments, and unlimited in its resources for the encouragement of personal vanity. Alexander appeared in Asiatic costume, and what became the monarch was shortly found becoming to the subject. The opulence and taste for tinted luxury of the times had the effect of leading the artists, and most of all the painters, to produce works conspicuous for Oriental picturesqueness and wealth of colour. In this spirit even Apelles painted the procession of the Megabyzos at Ephesus, with his troops of eunuchs and Asiatic priestesses.

ALEXANDER S. MURRAY.

NOTES ON ART.

We regret that in the letter of Mr. Badger on the subject of the late Frederick Ayrton's caligraphs in our last, some expressions have been inadvertently printed, which it was not Mr. Badger's intention to insert in his communication, if it was to be published in an epistolary form. At the beginning of the first and second paragraphs words occur which convey the impression that the writer was only cognisant of the decision of the Trustees of the British Museum through a report in the newspapers, and that he had used some trouble to obtain a copy of Mr. Ayrton's will. To those who know Mr. Badger's relation to this matter both these expressions will appear inappropriate, and calculated to impugn Mr. Badger's good faith. The fact is that the fault was entirely our own. Mr. Badger's communication was set up in type as an unsigned note; but when it was found that it contained not only facts, but opinions for the accuracy of which the editor could not make himself responsible, it became at once apparent that the communication, if it was to appear at all, must be signed. In the hurry of going to press, it was impossible to communicate with Mr. Badger himself: and recourse was therefore had to a friend of Mr. Badger's, to sanction in his behalf the addition of his signature. As the alternative was the suppression of the communication altogether, this gentleman, acting, as he supposed, according to the wishes of Mr. Badger, authorized the signature; and Mr. Badger's subsequent request that the communication should not be published at all, arrived too late at the office for it to be possible to comply with it. This is the way in which expressions which are manifestly absurd in a letter from Mr. Ayrton's executor, but which would have been flagrant misrepresentations of fact if made by the editor himself, were allowed to stand. We repeat that we regret that Mr. Badger should have been placed in a false position by this mistake, for which we take the entire responsibility.

A valuable report on Pettenkofer's process for the restoration of oil paintings has recently been presented to the Industrial Society of Mulhouse by F. Goppelsraeder. He points out that no colours, however stable, can retain their brilliancy unless the oil with which they are mixed retains its optical properties. Good linseed oil contains 80 per cent. of the oil which chemists call *linolein*. This substance when exposed to the air takes up oxygen, increasing thereby in weight to the extent of 10 per cent., and becomes at the same time solid. This is the change called "drying." Molecular changes occur after a time in this dry oil, by which it is disintegrated and its transparency lost. In Pettenkofer's process the vapour of strong alcohol acts on the altered oil and restores it to its original state. The picture is inverted on a box containing flannel soaked with alcohol. Pettenkofer also uses balsam of copaiba, which can often be usefully applied to the back of a picture.

The new Science Schools at South Kensington, and the bridge which connects them with the Art Schools, have been decorated in Sgraffito work by the students, under the superintendence of Mr. Moody. The process was described by Mr. Alan Cole in

a paper read at the Institute of British Architects in the spring of this year. It is certain that the use of coloured plaster has been too little cultivated by architects.

Three important bas-reliefs, recently discovered at Salonica, are about to be added to the Imperial Museum of St. Irène (Turkey). They formed originally part of the portico of Constantine, and were found near the ancient *via Ignatia*. The first represents a mounted warrior, said to be Meleager, chasing a boar. The second shows the boar, and also a serpent coiled round a tree. The third consists of two hunters, followers of Meleager. They have tunics and short swords, and advance as though seeking an enemy.

The October number of the *Gazette des Beaux-Arts* begins with a long and profusely illustrated article by Albert Jacquemart on the Chinese bronzes exhibited in the Paris *Palais de l'Industrie*. The collection was brought together by M. Henri Cernuschi during a voyage of discovery in Japan, China, and Mongolia. Many of the articles exhibited possess great beauty and interest. Alfred Darcel concludes his notice of the Tours Exhibition, and Ch. Tardieu contributes a second portion of his valuable critical account of Mr. John M. Wilson's collection. Another article on the Vienna Exhibition by René Ménard deals with the schools of England, Sweden, Norway, and Denmark. There are also interesting articles on "Aphrodite," on "Philip Wouwerman," and on Mediaeval coins.

Since Dallaway's very imperfect descriptions in his *Anecdotes of the Arts in England*, 1800, we have had no connected account of the treasures of ancient sculpture existing in the private collections of this country, except such accounts as have been given from time to time by German archaeologists, in particular those of Conze, Michaelis, and Hübner in the *Archaeologische Zeitung* of Berlin. Even critical remarks on individual collections such as Newton's *Notes on the Sculptures in Wilton House* are next to unknown in our literature. We are reminded of the want of native interest in these matters by the fact that during the past summer all the accessible collections—and thanks to the courtesy of the owners, that is nearly all—have been carefully examined by Professors Michaelis of Strassburg and Matz of Halle. The immediate object of the former was to note and obtain photographs or drawings of all Greek sepulchral reliefs for publication in the work with which he and Prof. Conze are charged by the Academy of Vienna. The object of Prof. Matz was to obtain drawings of all the sculptured sarcophagi for an exhaustive work on that subject, on which he has been for some time employed at the instance of the Archaeological Institute of Rome. Both have however made notes of the other sculptures which they found, and while Prof. Matz has already communicated some of his observations in the last number of the *Archaeologische Zeitung*, Prof. Michaelis reserves his notes for a report which will be made at some length to the Academy of Vienna.

A new Bourse, built after the plans of M. Léon Suys, will be opened in Brussels in December.

We learn from the *Moniteur des Arts* that a new gallery of sculpture will shortly be opened in the Louvre.

The well-known engraver, Léopold Flameng, is now in Holland, engraving Rembrandt's celebrated "Night Watch."

An exhibition of the works of Winterhalter is being arranged in Basle.

A cast from the sculptured metope found by Dr. Schliemann, representing Helios in his chariot, has just arrived in the British Museum.

New Publications.

DU CERCEAU, J. A. Les plus excellents bastimens de France. Sous la direction de M. H. Destailleur, architecte du gouvernement. Nouvelle édition. T. I et 2. Paris: A. Lévy.

FÉE, M. A. Etudes sur l'ancien théâtre espagnol: Les trois Cid (Guillen de Castro, Corneille, Diamante), Hormis le roi personne; Ce que sont les femmes; Fragments de la Célestina. Paris: Firmin Didot.

HAMERTON, P. G. Thoughts about Art. New edition, revised. Macmillan.

HEHLE, Der schwäbische Humanist Jakob Locher Philomusus (1471-1528), eine kultur- und literarhistor. Skizze. 1 Thl. In Comm. Tübingen: Fues.

KINGSLEY, C. Prose Idylls, new and old. Macmillan.

LIECHTENSTEIN, Princess M. Holland House. Macmillan.

LOUANDRE, C. Chefs d'oeuvre des Conteurs français avant La Fontaine, 1050-1650. Paris: Charpentier.

LÜBKE, W. Vorschule zum Studium der kirchlichen Kunst. 6 Aufl. Leipzig: Seemann.

LUDWIG, O. Nachlassschriften. Hrsg. v. M. Heydrich. 1 Bd. Skizzen u. Fragmente. Leipzig: Cnobloch.

MEYER v. KRONAU, G. Die Sage von der Befreiung der Waldstätte. Basel: Schweighauser.

PFNOR, R. Le Mobilier de la couronne et des grandes collections publiques et particulières du xiii^e au xix^e siècle. Livr. 4, 5. Paris: Juliot.

PREGIER, W. Dantes Matelda. Ein akadem. Vortrag. München: Franz.

RAHN, J. R. Geschichte der bildenden Künste in der Schweiz. 1 Bd. 1 Abth. Zürich: Staub.

ROXBURGH BALLADS. Edited by C. Hindley. Reeves and Turner.

THE DRAMATISTS OF THE RESTORATION. Crown. Vol. i. Sothoran.

VINCENTIIS, G. de. Gulistan: ossia il Roseto dello Scech Sa'di da Schräz. (Prima versione italiana.) Napoli: Detken e Rocholl.

VITU, A. La Chronique de Louis XI., faussement attribuée à Jean de Troyes, restituée à son véritable auteur. Paris: Lib. des Bibliophiles.

WARING, J. B. My artistic life. Trübner.

WILLSHIRE, W. N. An introduction to the study and collection of ancient prints. Ellis and White.

WOLTMANN, A. Holbein und seine Zeit. 2. umgearb. Aufl. 1 Bd. Des Künstlers Familie, Leben, und Schaffen. Leipzig: Seemann.

Theology.

Histoire des origines du christianisme. Livre iv., L'Antechrist. Par Ernest Renan. Paris: Lévy. 1873.

THE present volume begins with St. Paul's arrival at Rome, and ends with the destruction of Jerusalem. During this period Christ was glorified in the death, as in the life, of his greatest servants. The opposite of Christ seemed to come to a kind of glory in the career and even in the disappearance of Nero. For as prophecy shaped itself more definitely in the fulness of time, it was imagined that evil, in order to its defeat by the only power which could defeat it, must reach its full historical realization in an inverted image of Christ. The name belongs to a somewhat later date, but not the thing. At least it is the leading thought of the present volume that Nero was invested with this character in the eyes of those who survived his persecution, nay was in fact to Christianity a sort of second founder by antagonism.

The idea is worked out with not less on the whole than the author's well-known power, but with an appearance sometimes of want of finish, due perhaps to the miscellaneous quality of the matter. In fact the book has not the unity of its title: but a sort of kernel is formed by ch. vi.-ix., xiii.-xvii., which deal with Nero, the epistle to the Hebrews, and the Apocalypse, and are inspired by the thought of the antagonism between Christ and Antichrist, above all by the recollection of the great persecution of 64.

There are not many writers in whom it would be judicious, but M. Renan is doubtless right in describing these horrors with little reserve (ch. vii.). The most forcible pages perhaps in the volume are those which insist on their immense historical importance in establishing the enthusiastic tradition of passive resistance; Nero being finally presented as the not absolutely unconscious creator of the aesthetic ideal of Christian womanhood. The strictly literary critic would have several things to say of this passage. But in this place

it is necessary to avoid even the historical questions connected with the persecution, which are raised by M. Renan's use of his authorities: as well as the rich archaeological illustration, which is to this volume what scenery and topography were to the others.

The Christians who survived the crisis, or an important number of them, escaped from Rome. This has been inferred by others from the mention of Italians apparently out of Italy in the epistle to the Hebrews (xiii. 24): M. Renan decides that they went to Ephesus (p. 206). Antichrist accompanies them eastwards in more than one form, and at any rate in a state of feeling and imagination described (p. 202) in language which reminds one of what we have read about the Parisian mind after the late siege. The evidence is the Apocalypse four years later; and St. John is inferred to have been of the number. Meanwhile Barnabas, who is also of the number, collects, confirms, and reconciles the church of Rome by means of what has since been called the epistle to the Hebrews (pp. 210 ff.). M. Renan, like some other critics, thinks the notices of persecution in this epistle apply naturally to Nero's at Rome, although, unlike other critics, he has aggravated the difficulties of this interpretation by his sensational diagnosis of the writer's mental atmosphere. It may be asked how the supposed circumstances agree with the scholastic disputation which forms the vehicle if not the substance of so much earnest pleading in the first two-thirds of the epistle. But these things are not what M. Renan finds there. He recognises no effort to produce theoretical conviction, still less any apprehension of a relapse into Judaism; the doctrinal reasoning is refined into a sort of effusive doxology over the happy extinction of worn-out controversy. This, remember, in 65 or 66; for here again the interpretation is not so strange as its adjustment to given or assumed conditions. In the matter of this reasoning, what most strikes M. Renan is its Pauline indifference to Christ's earthly life (pp. 221 f.; comp. p. 60, perhaps an indirect reply to Dr. Keim's remarkable chapter on the gospel according to Paul): he is less interested in the differences between "Barnabas" and St. Paul (which no doubt it is easy to exaggerate) than in their common distance from "the precepts of the lake of Gennesareth." Yet one misses more in him than in more professional expositors all impression of those touches of human sympathy and of capacity for temptation which would alone make this epistle unique in the New Testament. The most permanent value of the epistle he finds in the elimination of sacrifice from religion; by which it carried on, he says, the work begun by Isaiah. Here however the writer casts much of his bread on the waters, as M. Renan seems to admit in the last lines of this tenth chapter; and his chief services to his generation are his exhortations to endurance, his rigorous judgment on the lapsed, and above all his efforts to strengthen the Church by means of the memory of the departed. M. Renan adds *to unite*, and makes the epistle to the Hebrews consolidate a reconciliation which has been effected by the persecutor.

If we omit the grotesque tragedy of Nero's death (ch. xiii.), Antichrist next appears, where he would first be looked for, in the Apocalypse, which is minutely but not very formally expounded (ch. xv.-xvii.); with great artistic effect, and with more sympathy than would be expected by a reader who lighted first on the general observations at the end (pp. 473-480). What is there said about the Jewish exclusiveness of the book is serious criticism; though one would have expected that some room would have been made for the ascetic element, whatever its relation to Judaism. So is the comparison with the Gospels; and there is an excellent remark, if less happily phrased than

usual, about the relation of the Apocalypse to religious art and the sacrifice of grace to gorgeousness. But the theology is not treated with justice. There is a time certainly for weighing coolly even such words as those about wiping away tears; but M. Renan appears to class them with the description of the city and its precious materials. The passage will be read however with respectful interest for the sake of M. Renan's own theological confession. The vision, it is taken for granted, is a vision in the sense in which Mr. Tennyson's *Vision of Judgment* is a vision. The interpretations, which are not discussed except in desperately doubtful cases, but are assumed and applied in course of description, are mainly those of the usual Nero solution; the key of the whole being that popular expectation of Nero's return* which would no doubt occupy a far larger space in our historical imaginations, if we had Tacitus's account of its consequences, including what the introduction to his *Historiæ* shows he considered one of the capital events of the Flavian generation. Of course the "number of the name" (xiii. 17 f.) is the numerical value of Νέρων Καῖσαρ in a Semitic alphabet for the usual reading 666, or of Nero Caesar for the variant 616. As this double coincidence gives, not a more or less appropriate epithet of a more or less determinate object, but the proper name of the man otherwise indicated, as shown on his coins in the province in which the book appeared (p. 417), it is quite right for a critic, who does not take advantage of any hypothesis of supernatural prediction, to pass in silence the very existence of innumerable competing interpretations. The only shade of difficulty is the absence of Ϟ after the Ϟ which stands for the K or C. M. Renan accepts the explanation that this not in itself surprising *scriptio defectiva* was adopted for the sake of the talismanic-sounding number it gives: but it would be more satisfactory to have a case exactly in point earlier than the third century. With a more analytical treatment than M. Renan's it would be remarked that to make Nero the subject of this part of the book does not fix its date to the year after his death. What does fix the date is, besides the proximity of the persecution before and the siege of Jerusalem after, the symbol of the seven heads (xvii. 10 f.). On this it has been asked, Where are we to begin? Which way are we to count? How many are we to leave out? According to the solution substantially adopted by M. Renan the answer is, Begin at the beginning, count in the only direction then possible, and leave out none. However there is a question whether the beginning is at Julius as in the 5th book of the Sibylline Oracles, or at Augustus as in the 10th. And here M. Renan surely confuses what on his principles is a plain matter; thereby somewhat spoiling what he has done towards popularizing the common-sense exegesis which gives us history instead of riddles. Julius is the first of the Caesars, but Augustus is the first of the Augusti or Σεβαστοί; and M. Renan accepts Σεβαστός as the name of blasphemy (p. 413, Apoc. xiii. 1, comp. σέβασμα, 2 Thess. ii. 4): yet he insists on beginning with Julius (pp. 407, 432). So Nero becomes sixth and would naturally be the *one* who comes after the *five* and *now is*; and accordingly some who have begun with Julius have consistently dated the book under Nero. But M.

* Not from the dead, according to M. Renan (pp. 317 ff., 351), as the theory is sometimes stated, especially by those who wish to discredit it, but also by Dr. Hilgenfeld, who with Dr. Volkmar supposes the pagan Nero-legend derived from the Christian. *Z. f. wiss. Theol.* 1869, iv. 424 f., 436, 445. The Apocalypse seems to avoid saying what is become of Antichrist. See xiii. 3, 12, 14, xvii. 8, 11; and even 10; for *ἐρεω*, in which some find a difficulty, may have been chosen in order to include Nero's case along with that of the unquestionably deceased emperors:—not indeed according to M. Renan's view of the seven heads, but according to the more usual one.

Renan, who like other people makes Galba the *one*, supposes Nero passed over at his historical place, and his return predicted in the *other who is not yet come*. This seems to torture v. 10 f. sadly; the motive being no doubt the supposed advantage, not of beginning with Julius, but of limiting the predictive part of the prophecy to Antichrist, and ignoring any real successor of Galba's. But it is clearly Tacitus's view that to provide Galba with a successor was, for some time before it was done, the business of policy, conspiracy, and gossip (*Hist.* ii. 12 ff., 23); and the writer to the seven churches was not obliged to make up his mind between Vitellius, Otho, and Piso Licinianus. To suppose the succession already in prospect would fix still more firmly M. Renan's date of January, 69 (pp. 352, 355, 436-9, 487 f.). Of Harmagedôn (xvi. 16) M. Renan despairs (p. 428), disdaining the modern refuge of vagueness. He professes as critic (p. 422) to despair of the False Prophet (xiii. 11 ff., xvi. 13, xix. 20, xx. 10), but is more confident as historian, informing us (p. 353) of an ardent partisan who by various means, including miracles, obliged people to recognise either the sham Nero or the imaginary one.

Dr. Volkmar's solution of this last vexed question is barely alluded to (p. 420): but, as readers of *S. Paul* know, M. Renan accepts the opinion that St. Paul and his followers are the heretics denounced to the seven churches, or rather to five of them; and no one would look in this volume for further facts in support of his view of St. Paul's relation to the other apostles. But the volume throws light on the line of thought which has determined his judgment. M. Renan has an inclination to admit the antiquity and genuineness of epistles and the like, apparently out of proportion to his readiness to deal freely with narrative testimony. To a man who thinks the Apocalypse apostolic and the epistle of James and the first of Peter genuine, while he is always ready to treat particular statements in the Acts as coloured by the writer's general views or intentions, a theory like M. Renan's, which detaches St. Peter from the other "pillars," must appear to lie on the face of the facts. This intermediate position is not exactly inconsistent; but perhaps it has less solidity than either of the extreme ones: nor would it be the only case in which M. Renan adopts a powerfully supported theory with modifications which endanger its stability. Thus ch. iv., "Dernière activité de Paul," is a suicidally forcible statement of the theory which traces the theology of the later epistles to the circumstances of St. Paul's life at Rome. There is little attempt to attenuate the transformation; in fact it may be said that Baur's century of evolution is squeezed into four or five cataclysmic years; thanks, partly to the "effect of imprisonment on powerful minds," partly perhaps to external forces at Rome (pp. 24, 74 f.): yet a parallel movement, we are significantly told, went on in Asia Minor (p. 84). St. Paul's capacity for conversion suggests some curious meditations on his conceivable mental course after we lose sight of him (pp. 101 ff., 200; comp. 76 and *S. Paul* 373). His fate is left very doubtful: but here and with St. Peter M. Renan loves to indulge tradition just enough to justify enlightened pilgrims in meditating on possibilities over every consecrated site. That St. Peter was at Rome M. Renan is pretty certain, more than that St. John was at Ephesus. The discussion (pp. 554, 29, 187) is remarkable for employing Dr. Lipsius's analysis of the Ebionite legend to support the theory that this is founded on fact. Dr. Lipsius, indeed, might draw this inference, if he was so minded, because he traces the legend high up and makes it point to Rome from the first.* But then (and this is what weakens the

argument in M. Renan's hands) what it says of St. Peter it says of Simon Magus. This is as it should be if Simon is scarcely anything but a caricature of St. Paul, who was certainly at Rome. M. Renan however regards Simon as an independent historical character, who, though his name came to be imposed on St. Paul, may really have been at Rome among other adventurers (p. 28): *may* have been, for M. Renan, reversing the famous epigram, is very doubtful of Simon while pretty sure of Peter. Surely, if the legend took such liberties with the identity of the one champion, it is poor evidence for the movements of the other. The first epistle of Peter is the subject of some very beautiful pages (ch. v.), and the chapter on St. James (ch. iii.) is a fine example of the author's power of illustration. It is one of several on Jewish affairs, which have more novelty about them than most of the rest: but they are less connected with Antichrist or the Beginnings of Christianity. Something must be omitted; and it is time to turn to the discussion of literary dates, authorships, and the like.

The only problem of the kind which is closely discussed is that of the authorship of the Apocalypse, which has lately entered a new phase. Formerly the criticism of the Apocalypse was a good deal sacrificed to that of the fourth gospel. Assuming that they cannot both have been written by the same hand, those who said the gospel was apostolic were logically obliged to deny this of the Apocalypse, and those who denied it of the gospel were illogically tempted to affirm it of the Apocalypse. But from the beginning of the century it has occasionally been asked, and six years ago it fairly became an open question, whether St. John can have written either of them; whether indeed he was ever near Ephesus at all. M. Renan's is perhaps the first important work which has approached this question in the interest of the Apocalypse; and he has the advantage of being able to attribute the book to the apostle (or rather to a disciple writing under his approval—p. xli.) unaffected by the old bias. His remarks (pp. 557 ff., xxi. ff., 207) are a good instance of the intellectual candour which admits the gravity of an objection which it is not prepared to dispose of. Here the objections are chiefly arguments from silence,* which have been met (*Z. f. wiss. Th.* 1872, iii. 382) by supposing two partisan traditions, one systematically ignoring St. John, the other St. Paul: but M. Renan does not avail himself of this explanation. In dealing however with the much discussed fragment (*Eus. H. E.* iii. 39) in which Papias describes his way of investigating tradition, he cuts the knot in two places. To meet the difficulty of St. John's being mentioned only among other apostles who have nothing to do with "Asia," and that low down in the list, he proposes (app., p. 562) to leave out St. John's name. Elsewhere (pref., p. xxiv) he would insert *μαθητῶν* before *μαθηταί* in the clause *ἃ τε Ἀριστίων καὶ ὁ πρεσβύτερος Ἰωάννης οἱ τοῦ κυρίου μαθηταί λέγουσιν*, to save the apostle from being superseded by the elder. The former emendation is justified in terms which make the elder identical with the apostle; and the latter must be intended to supersede it, for M. Renan leans strongly towards making him approximately contemporary with Papias (comp. p. 345.) Yet, assuming that contemporaneity is what the present tense *λέγουσιν*

* In this connexion is not some attention due to the fragment from one Pionius containing part of a life of Polycarp, worked up by Halloix (*Illustrium Ecclesiae orientalis scriptorum vitae et documenta, Vita S. Polycarpi*), who gives a few extracts from the Greek original, and translated in the *Acta Sanctorum* for Jan. 26? Some of it must have done duty in a Symeon metaphrastes used by Valois (comp. *Eus. H. E.* v. 24, note 6, with Halloix, viii. note k.) It begins with St. Paul, and brings Polycarp to grey hairs and the episcopate without mentioning St. John.

* *Petrussage*, especially pp. 16 ff., 81-84.

indicates, still, since Papias gets at his authorities only through persons who have frequented them (εἰ παρηκολούθηκός τις, curiously analogous to the Successors of the Companions of Mohammed), strict contemporaneity is so irrelevant that a very loose approximation will do. The elder might therefore be sufficiently contemporary with Papias, and a disciple of the Lord as well: we have only to make him live on as long as the apostle is commonly supposed to have done. However it is further argued that at any rate he cannot be the writer of the Apocalypse, else we should read of such an important person in the N.T. The consequence is that M. Renan joins issue, not with those who after Dr. Keim consider the Apocalypse to be by a John distinct from the apostle, but with Professor Scholten, who regards it as claiming to be nearly what M. Renan regards it as being, another person's report of things the apostle is supposed to see;—a nicety, by the way, which M. Renan omits to recognise. The greater part of the appendix is devoted to showing the special inconveniences of this form of the hypothesis, and to meeting certain minor assaults. On the whole he decides that the testimony of Polycrates (Eus. *H. E.* iii. 31) and Irenaeus outweigh all objections to St. John's presence in Asia; and that the authorship follows, chiefly because there can have been no one else who could take the same tone to the seven churches. It is curious that he makes no application of his own remark (p. 459) that Irenaeus's ignorance of the secrets of the Apocalypse goes far to damage his testimony to Ephesian traditions.

The other questions of literary history are very lightly treated. Some space is devoted to the epistle to the Hebrews (pp. xiii-xxi, 211, 217, 219 f., *S. Paul* lii-lxi); but we do not even get a word of the promised discussion (*S. Paul*, p. lxi) of the passages understood to imply that the epistle was written while the temple and its ritual subsisted. The argument for the address to Rome perhaps only requires concentration to be effective; that for Barnabas's authorship comes to this, that he is second-best in each line of competition. On the whole the motives of M. Renan's decision are less to be sought in formal argument than in the ease with which the hypothesis is supposed to fit into "an organically conceived narrative." This is still more true of the epistles of James and Peter (the 1st), with respect to which the test is expressly invoked (p. xi). They are pronounced genuine, and approximately dated by subtracting *one* from the year of martyrdom. St. Paul's epistles were discussed in the preceding volume. However there is a curious oversight which lets us see that the *circular* theory of the epistle to the Ephesians does not harmonize after all with M. Renan's "literary experience." If the reader examines p. 86, I think he will decide that it is felt indispensable to read ὑπὲρ ὑμῶν in Col. i. 7 "with the Sinai MS.," which unluckily reads ἡμῶν. M. Renan is elsewhere at issue with Dr. Tischendorf in citing this MS.: see pp. ix (1 Pet. v. 1), 383 (Apoc. v. 9), 411 (xiii. 1, fault of T.'s last ed.?), 444 (xix. 12, palaeographers' guesswork).

These genuinenesses are often of the secondary sort; much of the work being thrown on those "secretaries" who, Dr. Keim says, have never been fortunate in N. T. criticism. One object is to account for appearances of borrowing; only it is wonderful sometimes that the results of such secondary work should have won so much of the world's attention. Imagine Coleridge commenting Leighton on St. Peter's secretary excerpting St. Paul's secretary, who excerpts the epistle to the Colossians (pp. vii f.). The indebtedness is often a fact independent of any theory to account for it: but to throw it on the secretary is to throw it on poverty of ideas (pp. 112 ff.); whereas if the epistles are spread over a longer space of time the common phrases

become more like what they are now, language hallowed by many memories.

This fourth volume has brought us to the end of the period which in M. Renan's opinion closed the first great conflict among Christians, and details the outward events which he believes to have done more for this result than any efforts at mediation. Antichrist in fact reconciled St. Peter and St. Paul. The next volume (see pp. 201, 477, 300, 544, xxv, and the cover) is to try and tell us what they were reconciled in.

C. J. MONRO.

The Plan of St. Luke's Gospel: a Critical Examination by Rev. William Stewart, M.A., B.D. Glasgow. 1873.

WE must confess to having taken up this little treatise with a feeling of hopefulness, and to having laid it down with one of disappointment. The principles and the method (pp. 7-12) with which the writer starts are excellent. His conclusions (p. 97) appear to us, in the main, perfectly sound; and there can be no question that the intermediate portion has been worked out with great patience, conscientiousness, and ingenuity. But the result, we are obliged to think, is for the most part wasted labour.

Mr. Stewart's essay practically resolves itself into a discussion of the portion of the Gospel, ch. iii. 21—xviii. 14. This he divides at x. 24 instead of at ix. 51 as is usually done. Of these divisions the first is triply subdivided: α, iii. 21—iv. 22; β, iv. 23—viii. 3; γ, viii. 4—x. 24. And the order here is explained as topical. This is the most characteristic part of Mr. Stewart's theory. He supposes that each of the subdivisions has a sort of heading or text which is worked out in what follows. Thus in (α) the heading consists of iv. 21-23. To the account of the Baptism with its three moments, corresponds the account of the Temptation with its three moments; to the statement of the age at which Jesus began His ministry, the notice of the beginning of that ministry, iv. 15; and to the tracing of His supposed parentage, the visit to Nazareth with the question, "Is not this Joseph's son?" iv. 16-22. In (β) the heading is taken from the remainder of the discourse in the synagogue at Nazareth—it will be observed that the section here begins in the middle of a narrative—the several topics of which are paralleled by events at Capernaum, others which exhibit the prophet like Elijah, and like Elisha, the rejection by the Scribes and Pharisees, and the progress of the Messianic work—these events being ranged in a curious system of double columns. The heading of the third subdivision (γ) is found in the parable of the Sower, which is supposed to be illustrated by the rest of the narrative in this section.

In the second of the two great divisions Mr. Stewart thinks that the order is alphabetical, the different subjects being classified lexically under ἀγαπᾶν (three sections), αἰτεῖν (three), ἀντιλέγειν (one), βλέπειν (two), γενεά, &c.

This last suggestion is very ingenious, and we should be sorry to say that it may not have something in it. Several distinct analogies might be quoted in its support, e.g. Selden's Table Talk and the alphabetical Psalms. But it is hardly, in any case, tenable in this form. The division begins in the wrong place. The methods by which the sections are brought under the proper letter are often very forced. Thus the episode of Martha and Mary comes under ἀγαπᾶν, which is made to = "entertain"; the blasphemy against the Holy Ghost comes under ζῆλος; the salt losing its savour is represented by στερεός; the five sections from xvi. 14—xvi. 31 all come under χαίρειν. There is besides the difficulty that, so many of the passages being found also in St. Matthew, the inference seems to follow that the alphabetical arrangement (supposing it to exist) was due to St. Luke himself and not to

the earlier writer from whom he borrowed. But in that case the signs of it would scarcely have been so much obliterated.

The other part of the theory which relates to the first main division with its subdivisions seems to us quite incredible. Indeed it out-herods Herod by its portentous subtlety. It goes beyond even the most fantastic of the Germans themselves. We hardly need stay to point out the arbitrary divisions, the far-fetched and unnatural connections which it assumes, and the absence of any instance of a document constructed in a similar manner—for though the Apocalypse is constructed artificially enough, it is with a much more naive kind of artificiality. Mr. Stewart has made the radical and fatal mistake of basing his results upon the synopsis of Matthew and Luke without including that of Mark, and of considering simply the order of the narratives without regard to their internal verbal relations. If he had done this he would have found that the second Gospel is the true starting point. For its higher originality is proved by the fact that the proportion of coincidences between it and the other two Gospels taken separately, as compared with that between Matthew and Luke, is roughly speaking about 8 to 1, while the proportion of coincidence with Luke alone as compared to that between Luke and Matthew is nearly 3 to 1. Mr. Stewart's method, though sound as far as it goes, is incomplete. If he had taken in a wider range of phenomena we think he would have seen that his present theory is untenable. We hope he may make another attempt with better fortune.

W. SANDAY.

NOTICES OF NEW BOOKS.

The Land of Moab. By H. B. Tristram, M.A., LL.D., F.R.S. (Murray). The general verdict of critics as to the meagreness and inaccuracy of Dr. Tristram's geographical contributions appears to be only too well founded. The most important of the sites which he claims to have either recovered or verified have been long ago fully identified by Seetzen and other explorers, while the so-called discovery of Zoar on the brow of a hill 3000 feet above the valley is on philological as well as exegetical grounds too improbable to be accepted. These points have been already sufficiently dwelt upon in the *Athenæum* and other journals. But one "discovery" of Dr. Tristram has not as yet been examined with the attention it deserves: we refer to the remains of what he supposes, on Mr. Fergusson's authority, to be a palace erected—on the borders, remember, of the Arabian desert—by the Persian king Chosroes II. A competent American reviewer in the *Independent*, Sept. 18, speaks thus of this singular hypothesis. It "is founded merely on the least valid portion of the ornamentation as ground of reasoning, while throughout the account attention is drawn away from the characteristics which must go to determine the age of the structure. This least trustworthy portion of the ornamentation is the elaborate sculpture of vines and animals on the tympana of the façade. This, according to Mr. Fergusson's own statements, had its parallel in Christian Syria. Why then refer even this part of the work to Persian art and to the time of Chosroes? On the other hand, attention is drawn away from the wide base, the W shaped cornice and the running capital, all of which are Corinthian; also from the basilica within, which plainly shows not only its apse, but three perfect ones. . . . This part of the place was evidently the chapel of the structure and forms an insurmountable obstacle to the Persian palace. A Sassanian monarch never would have ornamented any building of his by all the Corinthian and Byzantine carving there is here in cornices and capitals, bosses and bases. It would be entirely at variance with his ideas, his tastes, his wishes, as well as beyond the power of his artists. Dr. Tristram indulges in a strange remark—"We found no other ruin in the whole country which bore the slightest resemblance to Mashita, either in situation, design, or execution"; which is presently belied by his own account of a neighbouring ruin, Kustul—evidently being another Mashita. . . . We sincerely regret to find Mr. Fergusson thus committed to a hasty opinion. His restoration of the palace, facing the title-page of Dr. Tristram's book, is as beautiful and unsubstantial a castle as any that were ever dreamt of as existing in Spain."

Profs. Milligan of Aberdeen and Roberts of St. Andrew's have produced a handy volume (T. & T. Clark, Edinburgh) entitled *The Words of the New Testament*. Though modestly designed "for popular use," it will be found useful to the student as a carefully compiled handbook of the "lower criticism." Part i. contains a clear sketch of the facts relative

to various readings: a concise account of the MSS. and versions: a list of early writers who cite from the N. T., which would have been more useful had the various books from which he cites been mentioned with each author: and a somewhat too brief sketch of the history of modern biblical criticism. Part ii., entitled "Mode of Dealing with the Facts," points out the several steps in classification which result in the determination of the text on principles of external and internal evidence. Part iii. deals with the most important cases of variety of reading arranged by chapter and verse, registering the readings adopted by the most approved scholars.

Canon Cook has published a pamphlet (Murray) on the inscription of Pianchi-Meramon, containing a translation of the inscription, and an essay on its relations to Isa. xviii., xix. Readers of the *Revue archéologique* will find but little which is not drawn, with due acknowledgment, from papers of M. de Rougé and M. Lenormant; but as the latter have escaped the attention of recent writers on Isaiah, Canon Cook has done well to introduce them to a larger public. His own accuracy as a translator of hieroglyphics is guaranteed by no less an authority than Dr. Birch, but we notice with some surprise his return to several antiquated renderings of the Hebrew, and his slightly too acquiescent attitude towards M. Lenormant, not merely as an Egyptologist, but a biblical critic.

It is impossible to give more than a passing notice to the commentaries on Romans and Galatians by Profs. Lipsius and Holsten, which distinguish themselves by their greater thoroughness from most of the other portions of the so-called *Protestantenbibel des n. T.* (Barth, Leipzig), to Clark's English edition of Keil on Ezra, Nehemiah, and Esther (a laborious and useful but uncritical work), and to the fourth edition of Schenkel's *Charakterbild Jesu*, a really good translation of which, from the third edition, is published by Messrs. Longmans.

The long-expected first volume of Grätz' *Geschichte der Juden* is coming out in parts.

Contents of the Journals.

Centralblatt.—Three specially good articles must not be overlooked.—1. Oct. 4. Overbeck's "Programme" on the epistle to Diognetus; comp. *Academy*, No. 64, p. 27. The reviewer thinks Dr. O. has succeeded in showing that all the received arguments for dating the epistle in the first half of the second century rest on a misconception, and that its composition after the close of the second century is not excluded by any data as yet elicited from the work; also that in its controversial method and description of Christianity it differs in many respects from the apologetics of the second century. Still the reviewer is not convinced by the arguments of the author. The peculiarities of the work admit of natural explanations without referring it to a later than the second century. In particular, its secular cast of thought can be paralleled from other writings of a tolerably early date; comp. the bold saying of Tertullian, "Unam omnium rempublicam agnoscimus, mundum" (*Apol.* 38). And this is not its only point of contact with Tertullian's *Apologeticum*. Further, the Pauline doctrine of man's incapacity for justification by his own works appears disjoined from the doctrine of the Law, not only in our epistle, but in Catholic writings of the end of the second century (e.g. Irenæus), to which period Zeller, Hilgenfeld, and Keim agree in assigning the epistle.—2. Oct. 11. *Celsus' Wahres Wort*; von Theodor Keim. This is a translation of the copious fragments of Celsus' work against Christianity preserved by Origen, with a running commentary, and a minute analysis, in which the sections on the philosophical and religious position of the author, his knowledge and estimate of Christianity, the date and place of composition, and the authorship of the work, are specially mentioned. Also two small dissertations on "two contemporaries of the *True Word*," viz. Lucian, with reference to his Peregrinus, and Minucius Felix, with special reference to the grounds urged against Christianity under the name of Caecilius. Keim has shown, among other points, that the so-called "Epicurean" Celsus, the contemporary and friend of Lucian, is identical with the Celsus of Origen. He also gives good reason for dating the *True Word* in the time of the persecution under M. Aurelius.—3. Sept. 13. Böhl's *Inquiries* after a popular Bible in the time of Jesus, and its connexion with the LXX., is analysed by Nöldeke, and its surprising results shown to be without a foundation of sound scholarship.

Theological Review. October.—Christian Pantheism; by C. B. Upton. [Review of Picton's *Mystery of Matter*, an eloquent but inconsistent attempt to reinstate theology on a Spencerian basis.]—On a passage in Genesis; by the Bishop of Natal, and Russell Martineau. [A reply to the arguments of Prof. Martineau for separating Gen. ii. 1-3 from the Elohist narrative. See *Theol. Review*, Jan., 1873. Mr. Martineau makes an able and satisfactory rejoinder.]

Monatsschrift für Gesch. u. Wiss. des Judenthums (ed. Grätz). June-October.—The sons of Herod; by Dr. Braun. [A most careful biography, containing valuable illustrations of the Gospel narratives. The author comes into frequent collision with Dr. Keim.]

—Justin Martyr and the Aggada; by Dr. Goldfahn. [Conclusion of a series of papers comparing the references to Jewish Aggadic traditions in Justin with the Aggadic statements in Jewish writings.]—History of the revolts of the Jews under Trajan and Hadrian; by Dr. Neubürger. [1. The revolt under Trajan; its well-concerted plan points to some eminent person as leader; good reason is shown for supposing this leader to have been the famous Rabbi Akiba.]—The rhythmic structure and age of Psa. xxix; by Dr. Grätz. [Dr. G. points out a fourth kind of parallelism, which has not, he thinks, been sufficiently considered,—the “palillogic,” which consists in the emphatic repetition of a single word or several words. It occurs frequently in the Song of Deborah, and also in Psa. xxix. The reference in the latter is not to ordinary phenomena of nature, but to some terrible catastrophe, and probably to the earthquake under Uzziah, comp. Amos i. 1, Zech. xiv. 4, 5.]—Lexical and archaeological material in the Talmud; by Dr. Zuckermandl.—Ibn G'anach's Book of Roots, review.

New Publications.

- DELITZSCH, F. Biblischer Commentar üb. die Psalmen: erste Hälfte. 3^{te} Auflage. Leipzig: Dörffling u. Franke.
 DÖLLINGER, J. J. Prophecies and Prophetic Spirit in Christian Era. Rivingtons.
 FICHTE, I. H. Die theistische Weltansicht u. ihre Berechtigung. Leipzig: Brockhaus.
 HEFELE, Bishop. Conciliengeschichte. 1 Bd. 2. verbesserte Aufl. Freiberg i. B.: Herder.
 HESSE, F. H. Das Muratori'sche Fragment neu untersucht u. erklärt. Giessen: Ricker.
 HIRSCHKE, K. Prolegomena zu e. neuen Ausgabe der Imitatio Christi. 1 Bd. Berlin: Lüderitz.
 IMMER, A. Hermeneutik d. neuen Testamentes. Wittenberg: Kölling.
 LE HIR, M. l'abbé. Etudes bibliques (suite). Poésie de la Bible. Le Livre de Job, traduction et commentaires, &c. Paris: Jouby et Royer.
 MEYER, H. A. W. Critical and exegetical handbook to the Ep. to the Galatians. Also to Romans, Vol. I. Edinburgh: T. & T. Clark.
 MARRIOTT, W. B. Memorials of W. B. M. Edited by F. J. A. Hort, M.A. Mitchell.
 PSALMS, Liber Psalmorum Hebraicus atque Latinus ab Hieronymo ex Hebraeo conversus. Ed.: Tischendorf, Baer, Delitzsch. Leipzig: Brockhaus.
 WURM, P. Gesch. der indischen Religion im Umriss dargestellt. Basel: Bahnmeier.

Philosophy and Science.

Autobiography. By John Stuart Mill. London: Longmans. 1873.

THIS book, the profound and engrossing interest of which it would be difficult to exaggerate, might perhaps be more justly styled “*Apologia pro vita sua*,” or “*History of My Speculative Opinions*,” than “*Autobiography*.” As the story of a life it is far from complete, but it is a faithful record of the growth of a mind of exceptional force, and of a character of signal elevation. The popular estimate of Mr. Mill, previously to the time when his entry into Parliament revealed somewhat of his true character to the world at large, was generally that of a narrow logician, a cold and unsympathetic reasoner, and a virulent because a mere speculative Radical. Never was popular estimate more ludicrously false. Mr. Mill's *Logic* was precisely the success it was, because extending the narrow limits of its predecessors it strove to bring the theory of method into some harmony with the ever-widening range of scientific inquiry; his political and social reasonings were quickened and elevated by a vehemence fervid but restrained; while so far from being a mere speculative politician, Mr. Mill was for six and thirty years of his life officially and intimately connected with one of the main branches of England's imperial policy, and was more directly responsible for its springs and issues than any of the more prominent statesmen of his time. Those who were at the pains to form a truer estimate of Mr. Mill from a study of his writings—and

there are many on whom those writings have had as profound and lasting an influence as those of any contemporary teacher—have long been aware that his salient characteristics were a solid though somewhat narrow culture, a moral sense singularly elevated and rigorous which but for his early training must inevitably have taken a religious turn, and an almost womanly vehemence of feeling restrained, though barely restrained, by the early and doubtless abnormal cultivation of his reasoning faculties. There can be little doubt that Mr. Carlyle hit the mark when, as we learn from the *Autobiography*, he read in his Scotch retreat a series of articles published anonymously in 1831 by Mr. Mill on “*The Spirit of the Age*,” and exclaimed, “*Here is a new Mystic*.” Mill repudiated the title, and afterwards tried, with doubtful success, to convince Carlyle that he was mistaken; the latter only replied that his friend was “*as yet consciously nothing of a mystic*”; consciously and openly he never became one, but in his character the mystic and even the ascetic were never very far from the surface, though training and circumstances forbade their outward growth. It would be idle to compare the life and influence of Mill with those of one whose *Apologia* the *Autobiography* in more than one respect resembles; but it may be said, perhaps, with truth, that had Mill been brought up a Churchman he might have written a “*Grammar of Assent*” and ended his days in the Oratory.

The time has not yet come, nor is this the place, for a critical estimate of the life and writings of Mill: we cannot do more in a short notice like the present than indicate without even detailing the many points of interest with which the *Autobiography* abounds. It is not a life, as we have said, nor does it pretend to be so, but it is the history of a mind, and may perhaps be fitly described in a few words as “*The Nemesis of Benthamism*”: it is the struggle of a mind of no ordinary power to shake itself free from the trammels of perhaps the narrowest system that was ever proposed as a theory of life. James Mill was not merely a Benthamite Radical, but a Scotchman who had discarded his own religion and looked upon all other religions as pernicious, austere, rational, without sympathy or sentiment; but he devoted himself with noble self-sacrifice to the education of his son, and gave him a training which both for its merits and defects was singular and exceptional. It is impossible not to respect the process, equally impossible not to deplore the result. As far as mere education is concerned Mr. Mill began life, as he truly says, a quarter of a century in advance of his contemporaries; but for all that makes life best worth having and raises a character to distinction he began life with nearly everything to learn and a great deal to suffer. He cannot recollect when he first learnt Greek, but has been told he began it at the age of three, and he pursued his studies at his father's side, the latter constantly supplying the want of a dictionary in the midst of writing the *History of British India*; at thirteen his father chides him without mercy for being unable to explain what he means by “*idea*,” and at an earlier age he is set to teach his brothers and sisters Latin at the time that he is learning it himself; he says his childhood was happy, but it can never have been childlike, and though he speaks of his father with touching respect and noble candour, it is manifest that their hearts never met, and that their intellects moved ever more widely asunder. Though his early training was almost exclusively in Greek and Latin, it is evident that he never completely assimilated the teachings of Classical Literature, and that its deepest sources of influence were almost wholly closed to him. The quotations in his works are notoriously inexact, and though before the age of eight he had read the lives of the philosophers by Diogenes

Laetius, he could in 1866 make the astounding statement that the first two chapters of Grote's *Plato* "contain as full an account as our information admits of the forms of Greek philosophy which preceded Socrates." He issued from his father's training a Benthamite Radical, a something for which he confesses the designation "a mere reasoning machine" would not be altogether inappropriate; the "Traité de Législation" was his gospel, and the reform of the world was his creed.

"I am one of the very few examples," he says, "in this country, of one who has not thrown off religious belief, but never had it; I grew up in a negative state with regard to it. I looked upon the modern exactly as I did upon the ancient religion, as something which in no way concerned me. It did not seem to me more strange that English people should believe what I did not, than that the men that I read of in Herodotus should have done so."

But the reaction was soon to come, for his nature was too rich and sterling to be satisfied with so jejune a creed. In a chapter of the deepest psychological interest he describes the mental crisis he underwent in his twentieth year—a crisis which all but made shipwreck of his life, and which entirely altered its subsequent course.

"The time came when I awakened from this"—his Utilitarian ideal—"as from a dream. It was in the autumn of 1826. I was in a dull state of nerves, such as everybody is occasionally liable to; unsusceptible to enjoyment or pleasurable excitement; one of those moods when what is pleasure at other times becomes insipid or indifferent; the state, I should think, in which converts to Methodism usually are when smitten by their first 'conviction of sin.' In this frame of mind it occurred to me to put the question directly to myself: 'Suppose that all your objects in life were realized; that all the changes in institutions and opinions which you are looking forward to, could be completely effected at this very instant: would this be a great joy and happiness to you?' And an irrepressible self-consciousness distinctly answered 'No!' At this my heart sank within me: the whole foundation on which my life was constructed fell down. All my happiness was to have been found in the continual pursuit of this end. The end had ceased to charm, and how could there ever again be any interest in the means? I seemed to have nothing left to live for."

The Nemesis was complete and well-nigh crushing; but after a period of almost intolerable depression, described with manly simplicity and candour, Mill emerged from the struggle with a character saddened by bitter experience, but chastened to a higher ideal. Relief was first sought in art and song, which had previously found no place in his philosophy; and discarding his former bleak ideal, he reached a theory of life which, recognizing that happiness can only be found by those who seek it not, gave a freer play to the sensibilities, a wider scope to the imagination, and a quicker stimulus to culture. From this time forth Mill continually drifted more widely asunder from his father's views, from his early associates, and from his democratic aspirations; he was no longer a Utilitarian propagandist, and his political ideal tended more and more towards Socialism. The strange story of this mental crisis is interesting in more than one aspect; it proves by a direct psychological experiment that what in the language of religious experience is called "conversion" is a phenomenon which can occur beyond and without the religious sphere; and it forcibly shows that to bring up a child without religious belief is no safeguard against the mental disaster of a shipwreck of faith. Such a crisis, more or less severe, probably forms part of the experience of all men of active intelligence, and few perhaps issue from it unscathed; but to subject a mind of exceptional sensibility and fervour to a training from which most of the finer elements of culture are omitted, is to court a catastrophe which must be severe and may be irremediable.

A mental crisis and the love of a woman mark epochs in the lives of most men whose lives are worthy of permanent record, and Mill was no exception to the rule. The romance of his life has long been known in outline from the noble words in which he has more than once commemorated

the life-long friend who became his wife in his later years. But the more detailed history of his relation to Mrs. Taylor is written in the *Autobiography*, in a manner which is as dignified as it is touching. She became his friend in 1830, but they were only married in 1851, her former husband, whose friendship Mill had never forfeited, having died two years previously.

"That event having taken place in July, 1849, it was granted to me to derive from that evil my own greatest good, by adding to the partnership of thought, feeling, and writing which had long existed, a partnership of our entire existence. For seven and a half years that blessing was mine; for seven and a half only! I can say nothing which would describe, even in the faintest manner, what that loss was and is. But because I know that she would have wished it, I endeavour to make the most of what life I have left and to work on for her purposes with such diminished strength as can be derived from thoughts of her, and communion with her memory."

She inspired most of his works, and contributed largely to many of them; indeed he himself declares that during the course of their friendship and married life his chief literary function was to interpret her thoughts to the world. She died suddenly at Avignon in the autumn of 1858, and the remainder of Mill's life, when he was not called away by public duty, was spent in the neighbourhood of her tomb.

"Her memory is to me a religion, and her approbation the standard by which, summing up as it does all worthiness, I endeavour to regulate my life."

She left one daughter, Miss Helen Taylor, who still survives, the solace of his bereavement, the cherished companion of his later years, and the chosen guardian of his posthumous works. Several passages, evidently relating to Miss Taylor, have been omitted in the present edition of the *Autobiography*. We regret though we cannot but respect the modesty which has dictated these excisions.

We have dwelt only on the more prominent points of interest which the *Autobiography* presents; but it would be a mistake to suppose that they are the only points of interest in the volume. For the present however we are compelled to pass over almost without notice, the vivid sketches of Mill's friends and contemporaries, of Grote, of the Austins, of Sterling, of Maurice, and of Bentham; the account of his early associates, among whom many will be surprised to learn that men like Samuel Wilberforce and Bulwer Lytton were numbered; the instructive reflections on life and society scattered profusely throughout the volume; the description of the rigorous training to which he subjected himself in speaking, writing, and debate; and the brief sketch of his public and Parliamentary career, with which the volume concludes. All these and many other topics deserve a more detailed notice than the present; but we have said enough perhaps to justify the estimate with which we set out of the engrossing interest of the book. There are few who take it up who will set it down unread, and few will rise from its perusal without increased respect for its author and sincere regret for his loss. There are many who regarded Mill in his lifetime as a dangerous thinker and a mischievous politician; there are others, who, like the present writer, owe him so much, that, however much they may dissent from some of his teaching, they must ever regard his memory with the deepest reverence and affection. But none can read his life, so simply yet so eloquently told, without acknowledging that in spite of all failures and mistakes it was a life nobly devoted to none but noble purposes.

JAMES R. THURSFIELD.

Notes on Scientific Work.

Geography.

Antarctic Meteorology.—The question of the weather to be expected in high Southern latitudes, about the time of the transit of

Venus, has formed the subject of a rather warm discussion in the papers during the present year, so that the appearance of some authoritative information on the meteorology of these rarely visited regions will be generally hailed as opportune.

The famous expedition to the South Polar regions in H.M.S.S. "Erebus" and "Terror" under Sir J. C. Ross in the years 1839-43, and the supplementary expedition of the (hired) sloop "Pagoda" in 1845, originated at the instance of the Royal Society, and the instructions prepared for the use of the officers, by the Committee of Physics and Meteorology, remain the most complete series of instructions on the subject in our language. Unfortunately, however, the regulations for the testing, &c., of the meteorological instruments were not thoroughly regarded, for the logs are said to contain no notice even of the numbers of the instruments on board the respective ships, nor of any of the comparisons which were to have been made at the various colonial observatories visited by the expedition. It has therefore been impossible to account for certain slight discrepancies between the barometers on board the two ships.

The only general account of the results which was published is thus described:—"Sir J. C. Ross has published, in his Narrative, abstracts from the meteorological register of the "Erebus," giving the daily maximum, minimum, and mean heights of the barometer, and of the thermometer in the shade, the mean temperature of the sea surface, prevalent wind and weather. These abstracts are, however, not altogether satisfactory, either as regards the plan upon which they have been drawn up, or the accuracy with which the data have been corrected. For instance, the direction of the wind has not been corrected for variation of the compass, although that amounts to 90° in some parts of Antarctic seas visited. Then, again, the barometer readings were reduced to 32° F. by a table which was calculated for scales on glass, and which differs at high temperatures from the table now employed for reducing observations taken from such wood-mounted barometers by .01 inch."

The Meteorological Office therefore decided to re-discuss these observations, and the results are now before us for the region south of 60° S. (*Contributions to our Knowledge of the Meteorology of the Antarctic Regions*. Published by authority of the Meteorological Committee. Stanford.) They are treated in separate areas of 2½° of latitude and 5° of longitude, according to the position of the ships from time to time. This method of publication confers an additional value on the results, for while Herschel, quoting Ross, gives a table of mean pressure from the equator southwards according to latitude simply, Buchan in 1868, giving an amended latitude pressure table, says very fairly:—"It is to be regretted that as the longitudes were not taken into account in taking those means, the geographical distribution of this anomalous depression cannot yet be accurately defined." (*Handy Book*, p. 54.) The information refers solely to the summer months, and of these the only months passed exclusively within the Antarctic regions were January and February, 1841-3. As the observations were taken hourly throughout the expedition, it has been possible to deduce the law of diurnal change for pressure and temperature (though this has not been done for the entire twenty-four daily observations), and thereby to throw important light on the course of these changes in high latitudes, and to render good service to cosmical meteorology.

The currents have been made out with as much accuracy as was possible from the observations taken in the two ships, and they show for the most part a general drift of the water from the barrier and pack ice.

Lastly, for the practical seaman in these latitudes, who will probably be in a whaler, notes as to the state of the ice and the marine fauna (monotonous enough in all conscience) have been given day by day.

The work has been executed by Mr. R. Strachan, and we may take leave of it by saying with the Office,—

"As the information is the most complete now available for the region in question, it is hoped that the investigation will prove acceptable to future Antarctic navigators."

The Wends of Lausitz.—Dr. Andree has contributed to the last part of *Petermann's Mittheilungen* an interesting paper on the changes in the area occupied by the Wends of Lausitz and the space over which their language extended, from the sixteenth century to the present time. This curious ethnographic island of Slavonic people lies in the midst of the great German-speaking area south-east of Berlin on the borders of Saxony, having Bautzen and Cottbus for its chief towns. As is to be expected, it is gradually and surely becoming Germanized. Almost all the Wends of Lausitz are now able to speak their own and the German language, and in the younger generation German is becoming more and more the prevailing tongue, so that the complete disappearance of the Wendish language here may be predicted. In the map illustrating his paper Dr. Andree has indicated the limits of the Wendish area in 1550 at the time of the Reformation, again in 1750, reduced to a circle within the former, and finally, at the present date, confined to a district extending from the vicinity of Bautzen to Cottbus.

Zoology.

Sedentary Annelids.—MM. Humbert and Saussure have edited and published *Recherches sur la structure des Annelides Sédentaires* by Edouard Claparède. This posthumous work is the last of the writings of this very distinguished naturalist, and forms a complement to his former works on the Annelids. The many difficulties attending its publication will fully account for a two years' delay that has occurred. The Physical and Natural History Society of Geneva, which has done so much for each branch of science, was at first unable to undertake the expense of the preparation of the numerous illustrations; but the author's widow did not hesitate to make the needful sacrifice to ensure the immediate publication of so important a work, and a considerable donation enabled the Genevese Society to add this to the other memoirs by Claparède already published by them. This memoir was written in the autumn of 1870, on the eve of Claparède's departure for Naples; on his way home again in the following spring he died. A sketch of his life by Henri de Saussure and a portrait by Hébert are contained in this memoir. The biographical notice originally appeared in the *Archives de la Bibliothèque universelle de Genève*, but by the desire of the family is republished here with a few corrections. A very brief sketch of this memoir may not here be out of place. Filled with a determination to thoroughly investigate the structure of the Annelids, but living at the time at Geneva, Claparède was compelled to select an Oligochaete worm for his researches; the results of his investigations appeared in a most exhaustive and beautifully illustrated monograph: *Histologische Untersuchungen über den Regenwurm*. A sojourn by the seaside however enabled him to push his studies still further, and in the present memoir he gives us the minute anatomy of several species of Polychete worms, together with a discussion of the question of the reciprocal affinities of the larger groups. Many structures could only be investigated in the living Annelids, others again were better seen in alcoholic specimens. The process of cutting the sections and staining them is fully described, and more than two thousand sections were made and mounted, the immense majority of the illustrations being drawn from actual sections. The instances where a drawing has been made up from a comparison of several sections is quite rare. The original drawings were of a large size, and were afterwards reduced by the pantograph. The minute structure of the Annelids is described under the following heads:—The cuticle; the hypoderm or cutaneous connective tissue; the muscular layers; the Setae; the perivisceral cavity; the circulatory system (one of the most interesting and critical chapters in this work); the digestive system; the respiratory system; the nervous system; and the segmentary organs. The explanation of the plates occupies forty-five pages and forms a most important portion of the work. The species selected for illustration are *Spirographis spallanzanii*, *Myxicola infundibulum*, *Protula intestinum*, *Owenia fusiformis*, *Terebella flexuosa*, *Stylarioides moniliferus*, *Audouinia filigera*, *Chaetopterus variopedatus*, *Artica foetida*, *Telepsavus costarum*, *Branchioma vesiculosum*, and *Nereis cirratulus*. The patient investigator of these forms of life will find in this excellent work, compiled by its author with an arduous undiminished by a fast-approaching prospect of death, a model worthy of imitation. He may not be gifted, as Claparède was, with the powers of so exquisitely delineating what is seen, but this should not deter him from building on the excellent foundation which has been laid by the labours of Claparède.

New Ganoid.—Biologists will gratefully acknowledge the service rendered by the editor of the *Annals and Magazine of Natural History* in having translated, from the original Russian text, an account by Prof. Kessler of a remarkable fish belonging to the family of the sturgeons discovered by A. P. Fedchenko in the River Suir-dar in Turkistan. This fish differs greatly from all the known species of the genus *Acipenser* in which Russia is so rich, and belongs to the genus *Scaphirhynchus* established some time ago by Heckel as a North American sturgeon. Prof. Kessler calls the Turkistan fish *S. fedtschenkoi*; the native fishermen do not consider it to be a distinct species, but regard it as only the young of the sturgeon of the Aral Sea; they evidently do this in consequence of its normally small size, for the largest of twelve specimens examined by Prof. Kessler was but 8½ inches long, several of them being perfectly mature. Dr. Günther, in a note appended to the translation, remarks that this discovery is an additional interesting item in the series of instances by which the close affinity of the North American, North Asiatic, and European faunas is proved. He quotes as an analogous case the discovery of *Psephurus gladius* in the Yantsekiang, and adds: "After the discovery of this species that of a *Scaphirhynchus* in Asia might have been foreseen, just as I anticipate with confidence the discovery of a Ganoid in Borneo." (*Annals and Mag. Nat. Hist.*, vol. 12 (4th ser.), p. 269.)

New Zealand May Fly.—In the current number of the *Entomologist's Monthly Magazine* Mr. M'Lachlan describes *Oniscigaster Wakefieldi*, a new genus and species of Ephemeridae from New Zealand. The extraordinary abdomen of this genus, if considered apart and without regard to the rest of the body, might almost be pardonably mistaken for that of some Myriapod, without the legs, or of a crustacean.

Females only have been discovered, and till we gain some knowledge of the characters of the male, the affinities must remain somewhat uncertain. Mr. Eaton has pointed out in his Monograph on the Ephemeridae that a tendency to lateral production of the terminal segments of the abdomen is shown in several genera, but the amount of expansion hitherto known is infinitesimal compared with that present in this new form. For actual affinity in this respect one must look to the aquatic stages of some forms; and if the assertion by MM. Joly that the so-called genus of branchiopod crustacea *Prosopistoma* Latreille is, as appears probable, in reality only the aquatic condition of an Ephemerid, we have in the "Binocle à queue en plumet" the nearest ally, so far as regards abdominal structure, to *O. Wakefieldi*. (*Ent. Monthly Mag.*, No. 113, p. 108).

Physiology.

Functions of the Brain.—A summary of the researches made in this direction by Prof. Ferrier and communicated by him to the Bradford meeting of the British Association, appeared in the *Academy* for the 1st October. We now direct attention to the very valuable paper by Dr. Ferrier on the same subject which has just appeared in the *West Riding Lunatic Asylum Reports* for 1873, entitled "Experimental Researches in Cerebral Physiology and Pathology." Some time since Fritsch and Hitzig exposed the brain of various animals by the removal of the skull cap, and applied electrical currents to various points of the surface; they arrived at the conclusion that the anterior part of the convex surface of the cerebrum was concerned in the production of movements, that the posterior part is *not* motor, and further that there are special centres for special cerebral functions. More recently Nothnagel has attempted to ascertain the functions of the different regions by injecting small quantities of concentrated solution of chromic acid. Dr. Ferrier has pursued the same plan in his experiments as that adopted by Fritsch and Hitzig. The kind of electricity was the induced current of the secondary coil of du Bois Reymond's magneto-electrical machine excited by one cell of a Stohrer's battery. A limited portion of bone was removed with the trephine and the dura mater, which is exceedingly sensitive, cut away. The stimulation of the surface of the hemispheres by electricity causes functional hyperaemia in the parts irritated. The animals were narcotised in one way or other. The results he obtained are summed up in the following propositions:—1. The anterior portions of the cerebral hemispheres are the chief centres of voluntary motion and the active outward manifestation of intelligence.—2. The individual convolutions are separate and distinct centres; and in certain definite groups of convolutions (to some extent indicated by the researches of Fritsch and Hitzig), and in corresponding regions of non-convoluted brains, are localised the centres for the various movements of the eyelids, the face, the mouth (and tongue), the ear, the neck, the hand, foot, and tail. Striking differences corresponding with the habits of the animal are to be found in the differentiation of the centres. Thus the centres for the tail in dogs, the paw in cats, and the lips and mouth in rabbits, are highly differentiated and pronounced.—3. The action of the hemisphere is in general crossed; but certain movements of the mouth, tongue, and neck are bilaterally co-ordinated from each cerebral hemisphere.—4. The proximate causes of the different epilepsies are, as Dr. Hughlings Jackson supposes, "discharging lesions of the different centres in the cerebral hemispheres." The affection may be limited artificially to one muscle, or group of muscles, or may be made to involve all the muscles represented in the cerebral hemispheres, with foaming at the mouth, biting of the tongue, and loss of consciousness. When induced artificially in animals, the affection as a rule first invades the muscles most in voluntary use, in striking harmony with the clinical observations of Dr. Hughlings Jackson.—5. Chorea is of the same nature as epilepsy, dependent on momentary (and successive) discharging lesions of the individual cerebral centres. In this respect Dr. Hughlings Jackson's views are again experimentally confirmed.—6. The corpora striata have crossed action, and are centres for the muscles of the opposite side of the body. Powerful irritation of one causes rigid pleurosthotonus, the flexors predominating over the extensors.—7. The optic thalamus, fornix, hippocampus major, and convolutions grouped around it have no motor signification (and are probably connected with sensation).—8. The optic lobes or corpora quadrigemina, besides being concerned with vision and the movements of the iris, are centres for the extensor muscles of the head, trunk, and legs. Irritation of these centres causes rigid opisthotonus (and trismus).—9. The cerebellum is the co-ordinating centre for the muscles of the eyeball. Each separate lobule (in rabbits) is a distinct centre for special alterations of the optic axes.—10. On the integrity of these centres depends the maintenance of the equilibrium of the body.—11. Nystagmus, or oscillation of the eyeballs, is an epileptiform affection of the cerebellar veulomotorial centres.—12. These results explain many hitherto obscure symptoms of cerebral disease, and enable us to localise with greater certainty many forms of cerebral lesion.

The Pancreatic Secretion.—The following is a summary by Dr.

Pye-Smith, published in the *London Medical Record*, of an inaugural dissertation by Dr. Landau on the conditions of pancreatic secretion. The first series of his experiments was undertaken in order to obtain normal results so as to control the subsequent ones. The animals chosen were large dogs, which were subjected to the influence of woorara; then keeping up artificial respiration, an incision was made along the linea alba, a finger's breadth below the eusiform cartilage, long enough to expose the pylorus and draw out the duodenum and part of the pancreas. The intestine was then opened with a pair of scissors, and a glass tube passed into the orifice of the chief pancreatic duct. This was afterwards secured by bringing a fold of mucous membrane over it, and tying a ligature round both. This canula communicated with a long graduated tube, the divisions being 0.8 of a centimeter apart, and each corresponding to 0.01 of a cubic centimeter, as the object was to obtain relative and not absolute results. The second smaller duct which in the dog joins the duodenum close to the gall duct was sometimes neglected. The stoppage of pancreatic secretion, observed by Bernard after any severe operation on the abdomen, was in their experiments only slightly marked and then only temporary. The quantity secreted was rather small; the average of seven experiments was 0.2 cc., the highest being 0.65, the lowest 0.13. The second series of experiments was on the effect of atropine, Calabar bean, and nicotine on the amount of secretion. The first of these poisons has been shown by Kenchel and Heidenhain to paralyse the exciting fibres of the chorda tympani to the submaxillary glands, and thus diminish the secretion of saliva. As the result of eight experiments, Dr. Landau finds that it has no influence on the amount of pancreatic juice secreted. A similar negative conclusion was drawn from the same number of experiments after injection of calabar. Fifteen observations with nicotine proved that this alkaloid acts as a stimulant to the pancreas as well as to the salivary glands; but the author prudently declines to ascribe this without further reason to its direct action upon efferent nerves. In the course of these experiments it was ascertained that there was no constant and direct relation between the blood-pressure measured in the carotid, and the amount of secretion. In one instance the latter increased as the former fell. The third series of experiments was by direct irritation of nerves. The lingual branch of the fifth was first chosen, and its effect ascertained to be *nil*. Next the trunk of the vagus was irritated; and though the first experiment was followed by diminution of secretion, this was not the case in any subsequent one, and in some it was increased. Division of both vagi was more than once followed by increased secretion, but again was sometimes apparently without effect. Attempts to ascertain the effect of stimulating the origin of the pneumogastric did not succeed. But, by puncturing the medulla oblongata through the skull and applying the induced current, it was possible to obtain more constant though less satisfactory results. The secretion of the pancreas was increased. This, therefore, appears to be the chief positive result of these careful and laborious investigations, of which full tables are given detailing the amount of secretion observed at short and regular intervals. The fact of the central nervous system having a direct influence on the rapidity and amount of secretion of the pancreas is important, and these experiments will prepare the way for others directed to ascertain the exact position of the pancreatic centre and the efferent nerves by which its influence is conveyed.

Nutrition of the Body.—A long paper appears in the *Zeitschrift für Biologie*, Band ix. Heft 1., by Pettenkofer and Voit, giving the conclusions they have been able to deduce concerning certain phenomena of nutrition from a long series of experiments which they performed on a dog in 1861-2 and 3. The present paper deals only with the processes of disintegration which occur in the body when varying proportions of meat and of fat are given as food. In some of these 1500 grammes of meat were given with 30, 60, 100, and 150 grammes of fat; in others 500 grm. of meat with 200 of fat; and so on. Their experiments showed that fat is absorbed in large quantities from the intestine, and that within certain limits the larger the quantity of fat in the food the more is absorbed. But when a certain proportion has been stored up in the body less is taken up from the intestine. The most important conclusion at which they have arrived is that albumen is under ordinary circumstances more easily split up in the body into simple products than fat, so that so far from fat retarding the disintegration of albumen, albumen, if taken in sufficient quantity by a carnivorous animal, delays the oxidation of the fat by splitting up into some form of oleaginous compound and other secondary products, the former of which is more easily oxidisable than ordinary fat. The fat derived from the albumen must of course be estimated as food fat, and viewing it in this light, it may be said that the consumption of fat in the body increases with the amount of albumen present in the body, or in other words, the better the general state of the nutrition of the body the more fat is disintegrated. Lastly they show that the disintegration of fat increases notably with physical exertion.

Multiplication of Acaridae.—In a paper recently read before the *Académie des Sciences* M. Mégnin asks, Whence come the legions of acaridae which make their appearance with such rapidity in decomposing fluids, and what becomes of them when their work of destruction is

accomplished and the matter on which they feed is reduced to the condition of a dry powder? These organisms, he remarks, have no wings to bear them from spots desolated by famine; they have not the agility of ants to enable them to undertake long migrations; they have soft integuments which form but a very slight protection against external agents and their numerous enemies; their eggs relatively large are not found in the dust of the atmosphere in company with the germs of moulds and infusory animalcules; and they do not possess, like the anguillules, rotifers, and the tardigrades, the power of reviving after desiccation. Hence they are often referred to as illustrating the correctness of their views by those who hold the doctrine of spontaneous generation. But according to M. Mégnin, what happens in a colony of tyroglyphs when the privation of food seems to promise them speedy destruction, is that all adult and aged individuals as well as the young hexapod larvae die, but the young and the octopodous nymphae are preserved. These undergo a change of form and become clothed with a cuirass which completely disguises but at the same time protects them; moreover they acquire a sucker by which they are enabled to adhere firmly to any passing object such as flies, spiders, myriapods, and insects of all kinds, or even to quadrupeds, by which they are transported to places they could never reach by their own unaided efforts. If they find a suitable locality, as on a young mushroom or a mass of decomposing substance, the little acaridan quits its temporary host and its hypopial form and reassumes the original tyroglyphic one. Under the influence of abundant food it rapidly enlarges, becomes a sexual adult, and in forty-eight hours a new colony appears.

Not long after the death of Gustav Rose the science of mineralogy experiences another great loss by the death of the venerable Prof. Breithaupt of Freiberg, which took place on the 22nd of last month. Johann August Friedrich Breithaupt was born at Probstzella, near Saalfeld, in May, 1791, and so far back as 1813 already held an appointment in the institution, his connection with which has now after a lapse of sixty years been severed by his death. First he was appointed Edelstein-Inspector and Hilfslehrer in the Bergacademie, and in 1827 was created professor of mineralogy in that school. His first work was a "Kurze Charakteristik" of the mineral system, which appeared in 1820, followed by a "Vollständige Charakteristik" that passed through two editions. His chief production however was the "Handbook of Mineralogy," which appeared in three volumes between the years 1836 and 1847. His memoirs on minerals written from time to time during more than half a century, from the first, that appeared in 1855 on genuine crystals, to the one dictated with difficulty through failing sight and increasing infirmity and published in the *Journal für praktische Chemie*, at the commencement of the present year, contain vast stores of results of the highest value for the advancement of mineralogical science.

The publishers of *Poggendorf's Annalen* will shortly issue a Jubelband of the *Annalen* illustrated with photographic likenesses of many of the chief contributors.

New Publications.

- ASSOCIATION FRANÇAISE pour l'Avancement des Sciences. Compt. rend. de la 1^{re} Session 1872. Paris: Au Sec. de l'Assoc.
- BARDENHEWER, O. Hermetis Trismegisti qui apud Arabes fertur de castigatione animae libellus editus, Latine versus, adnotationibus illustratus. Bonnae: apud Marcum.
- BLACKWALL, J. Researches in Zoology. Second emended Edition. Van Voorst.
- BLOCK, E. Beiträge zur Theorie der Lichtbrechung in Prismensystemen. Dorpat.
- BOUÉ, A. Ueber die aus ihren Lagerstätten entfernten und in anderen Formationen gefundenen Petrefacten. Wien: Gerold's Sohn.
- DECAISNE, M. J. Remarques sur les espèces du genre *Eryngium*, à feuilles parallèles. Paris: Martinet.
- DUVAL-JOUVE, M. J. Sur la synonymie de quelques cypéracées. Paris: Martinet.
- DVORAK, V. Beobachtungen am Kundt'schen Manometer. Wien: Gerold's Sohn.
- DYBOWSKI, W. Monographie der Zoantharia sclerodermata rugosa aus der Silurformation Estlands. Dorpat.
- EBERTH, C. J. Untersuchungen aus dem pathologischen Institut zu Zürich. Leipzig: Engelmann.
- EIMER, T. Zoologische Studien auf Capri. Leipzig: Engelmann.
- EXNER, F. Untersuchungen ueber die Härte an Krystallflächen. Wien: Gerold's Sohn.
- FISCHER, H. Kritische mikroskopisch-mineralogische Studien. 2 Fortsetzung. Freiburg: Trömer.
- HARTMANN, R. Beiträge zur zoologischen und zootomischen Kenntniss der sogenannten anthropomorphen Affen. 1^{er} Heft. Berlin: Friedländer.
- HARTMANN, R. Einiges ueber *Halodactylus diaphanus* Farre. Berlin: Friedländer.

- HÉBERT, M. Comparaison de l'éocène inférieur de la Belgique et de l'Angleterre avec celui du Bassin de Paris. Paris: Martinet.
- HEER, O. Ueber die Braunkohlen Flora des Zily-Thales in Siebenbürgen. Berlin: Friedländer.
- HEIM, A. Der Ausbruch des Vesuv im April, 1872. Basel: Schweighauser.
- HEITZMANN, C. Untersuchungen ueber Protoplasma: I. Bau des Protoplasmas. Wien: Gerold's Sohn.
- HIRSCH, A. Die Sternschnuppen. Basel: Schweighauser.
- HUMMEL, A. Handbuch der Erdkunde. Leipzig: Gebhardt.
- KETTELER, E. Astronomische Undulationstheorie. Bonn: Neusser.
- LAURENT, H. Théorie des Equations différentielles ordinaires, simul-tanées. Paris: Gauthier-Villars.
- LINDSTRÖM, G. Förteckning på svenska undersiluriska koraller. Stockholm.
- MANZONI, A. Il monte Titano. I suoi fossili, la sua età ed il suo modo d'origine. Firenze.
- MARKHAM, C. R. The Threshold of the Unknown Region. Sampson Low.
- MAS, M. Pomologie générale. Paris: Masson.
- MILL, John Stuart. Autobiography. Longmans.
- MOJSISOVICS VON MOJSVAR, E. Das Gebirge um Hallstatt. Eine geologisch-palaeontologische Studie aus den Alpen. Wien: Braumüller.
- PERTY, M. Die Anthropologie als die Wissenschaft von dem körperl. und geist. Wesen des Menschen. Leipzig: Winter.
- PFEIFFER, L. und KOBELT, W. Malakozoologische Blätter für 1873. Cassel: Fischer.
- PLANTÉ, G. Suite de recherches sur les courants secondaires et leurs applications. Paris: Walder.
- POHLENZ, R. Kunst und Methode der Züchtung. Prag: Calsc.
- PSCHIEDL, W. Berechnung der sphärischen Aberration bei einem sphärischen Hohlspiegel. Teschen.
- QUENSTEDT, F. A. Petrefactenkunde Deutschlands. Band iii, Heft 2. Berlin: Fues.
- RATZEL, F. Wandertage eines Naturforschers. 1 Theil. Zoologische Briefe vom Mittelmeer. Briefe aus Südtalien. Leipzig: Brockhaus.
- SCHMIDT, O. Die Anwendung der Descendenzlehre auf den Menschen. Leipzig: Brockhaus.
- SCHRAUF, A. Mineralogische Beobachtungen. Wien: Gerold's Sohn.
- SCHULZER, S. und KALCHBRENNER, C. Icones selectae hymenomycetum Hungariae. Berlin: Friedländer.
- SEXE, S. A. On the Rise of Land in Scandinavia. Christiania.
- SONNET, H. Dictionnaire des mathématiques appliquées. 2^e ed. Paris: Hachette.
- SZABO, J. Trachyte eingetheilt nach dem natürlichen System. Wien.
- TASCHENBERG, E. L. Forstwirtschaftliche Insektenkunde. Leipzig: Kummer.
- VON WALTENHOFEN, A. Ueber ein allgemeines Theorem zur Berechnung der Wirkung magnetisirender Spiralen. Wien: Gerold's Sohn.
- WITTE, H. Das Blatt. Eine monographische Schilderung des Baues und der Bedeutung desselben. Aus dem Holländischen übertragen von A. M. C. Jongkindt-Coninck. Ravensburg: Ulmer.

Philology.

Sathas' *Mediaeval Greek Library*. [Μεσαιωνική Βιβλιοθήκη, επιστολιὰ Κ. Ν. Σάθα.] 3 vols. Venice. 1872-3.

WE have repeatedly drawn attention in the pages of the *Academy* to the interesting publications at present being issued under the superintendence of the indefatigable historian C. Sathas, whose *Μεσαιωνική Βιβλιοθήκη*, three volumes of which we have now before us, constitutes a most important addition to the *Corpus scriptorum historiae Byzantinae*. M. Sathas possesses a strength of purpose and power of execution truly astonishing, and even if his published works were less valuable than they actually are, we should still find ourselves compelled to praise the honest zeal with which he endeavours to throw new light upon the darkest periods of the history of his country, viz. the later years of the Byzantine Empire and the Turkish dominion. The history of the Greek nation with respect to national and literary aims has been illustrated by M. Sathas in his two works *Νεοελληνική Φιλολογία* and *Τουρκοκρατούμενη Ἑλλάς*, which are supplemented by his *Ἑλληνικά Ἀνέκδοτα* (2 vols.) and his treatises *Ἱστορία τοῦ ζητήματος τῆς νεοελληνικῆς γλώσσης* (reviewed in

the *Academy*, vol. ii, p. 544 sqq.) and the *Βιογραφικὸν Σχέδιον* περὶ τοῦ πατριάρχου Ἱερεμίου Β'. The three volumes of the *Μεσαιωνικὴ Βιβλιοθήκη* contain a large number of texts previously inedited and bearing upon the history of the Greek nation in various ways, with elaborate and learned introductions by the editor. Our space forbids us to follow him through all three volumes, but we will briefly sketch the contents of this great work in the hope of inducing the reader to enter upon a further study of it for himself.

The first volume is entirely devoted to Byzantine writers (Michael Attaliates, Nicetas Choniates, and Theodore Choniates), and contains also a series of *χρυσόβουλλοι λόγοι* of the family of the Palaeologi and "Cral" Stephen of Serbia, who likewise uses the Greek language. At the end of the volume we find a metrical narration of the last days of the Byzantine Empire by a certain Ἱέραξ, in 734 lines. On this we would offer a few corrections: v. 87 ἐράσαι, 104 ὦ. 111 συντρίψαι. 193 we do not understand ἀμφίβιον; it should no doubt be ἀντίβιον "his adversary." 207 χαλεπωτάτη. 248 is not complete; but it is difficult to supply the defect. 295 ἦ instead of ἡ. 415 οὐχ. 422 ὑβριτίδι. 485 κεκυκλωμένην. 558 should probably be read ὡς δὲ ἱαπερᾶν. 592 βρυχώμενος. 630 αὐτοῦ, not ἑαυτοῦ. 657 ἀπὸ τοῦ Χριστοῦ. 717 the words τῶν ἐνδύσῃ appear to be corrupt. Then follow a catalogue of the libraries of Mount Athos, and a very interesting catalogue of the MSS. of the Monastery of the Holy Sepulchre (μετόχιον τοῦ παναγίου τάφου) at Constantinople.

Following the order of publication we now proceed to the third volume, which contains various writers illustrating the history of Greece under Turkish dominion, chiefly two historical works by *Καϊσάριος Δαπόντες* (in modern Greek), and by *Sergios Makraeos* (in Byzantine Greek). Of special interest is the short work on learned Greeks by *Demetrios Prokopios*, pp. 480-503, written a. 1721. This is a very important volume for those who are willing to convince themselves of the abundance of intellectual life still extant in Greece even in the worst epoch of her history.

We now pass to the second volume, the publication of which has been delayed until quite recently owing to the engravings required for the learned and exhaustive treatise on mediæval Cyprian coins by M. Paulos Lambros, one of the first authorities in this department of study. This volume contains two chronicles of the mediæval kingdom of Cyprus, by *Leontios Machaeras* and *George Bustronios*, both written in the Cyprian dialect, and valuable in respect both of their historical and their linguistic interest. The dialect of the island of Cyprus has received much attention in an excellent work of M. A. Sakellarios, professor at the Piræus (*τὰ Κυπριακά · τόμος τρίτος*, Ἀθήνησσι, 1868), who has also given a very full collection of Cyprian songs, fairy-tales, and proverbs, together with a valuable glossary of Cyprian words. M. Sathas has likewise added a very complete glossary to his edition of the two mediæval chronographers, but we could have wished that he had precisely indicated the various passages in which the words and expressions explained by him occur, as the late Professor *Mavrophrydes* has done in his excellent glossary on his *Ἐκλογή μνημείων τῆς νεωτέρας ἑλληνικῆς γλώσσης*. We will quote an instance to show how very useful and important such accurate references would be. In M. Sathas' glossary we find, p. 598 b, the explanation ἀναγιόμαι, ἀνδροόμαι, ἀνατρέφομαι, and we have indeed more than once met with this word in his chronicles. The word is the same as ἀναγιώνω explained by Sakellarios, p. 232, who justly derives it from ἀνά and γιός, the digammated form of γιός, so that the meaning would be ὡς υἱὸν ἀνατρέφω. (In his introduction, p. λ', Sakellarios mentions ἀγιόνω as a digammated word, but he does not give it in his glossary.) The very same word

occurs in the poem on Apollonios first published in my *Mediæval Greek Texts*, v. 427, καλῶς νὰ τὴν φυλάξουσιν, νὰ τὴν ἀναγιώσουν—where, however, my new edition will certainly read ἀναγιώσουν. I may, by the way, observe that M. Sathas should have mentioned this poem among the earliest compositions in the Cyprian dialect, as not only ἀναγιόνω, but also other expressions and forms point to this; nothing, however, being a stronger proof than the preposition ἀκ, instead of ἐκ, which the renewed collation of the Paris MS. by my learned friend E. Legrand has brought to light in three places. M. Sathas is wrong in explaining ἀκ = ἀπό (p. 598). The preposition known in ancient Greek as ἐξ and ἐκ corresponds to the Sanskrit *vah-is* "outside," which in itself presupposes an earlier form *vaghis*. In the *Trans. of the Philological Society of 1867*, p. 86, I had called attention to another modern form of the preposition, ὄχ, which I then maintained to be older than ἐκ, and I have now the satisfaction of adding to it ἀκ, a form decidedly nearer to *vahis* than the classical ἐκ. M. Sathas himself has ἀξ, ἐξ, p. 599. But to return to ἀναγιόνω, it may be suspected that another form mentioned in M. Sathas' glossary, p. 599, ἀναγνώνομαι, is merely a corruption (or even a misprint) instead of another spelling, ἀναγνώνομαι. This might have been settled at once, had M. Sathas indicated the passage in which his supposed ἀναγνώνομαι occurs.

Even such a cursory disquisition as that which I have just given may probably have convinced the philologist of the linguistic importance of the Cyprian dialect. Let us mention a few more words to illustrate the tenacity with which this dialect seems to have clung to early traditions. In a recent notice of *Morosi's Studies on Italian Greek* we quoted the word ἀρμυσία "marriage;" in Cyprian Greek we find ἀρμασία and the verbs ἀρμάζω and ὀρμάζω used in the same sense. In the same way πολεμῶ or πολομῶ frequently bears the simple sense of ἐνεργῶ. But many scholars will be pleased to hear that the Homeric λαοί (corresponding to the German *Leute*) still survive in Cyprus, where λας τῶν ἀρμάτων is a common appellation for ὁπλίται. See also Sakellarios, p. 327.

We have been much interested in comparing the songs given by Sakellarios, pp. 39-46, with the narration of the same event in the chronicles of *Machaeras*, pp. 164-176 (see also Sathas' Prol. p. 45). A passage of the latter may serve to give the reader an idea of the general character of this dialect. ὁ ῥήγας ἐγράψεν τῆς ῥήγαινας πολλὰ θυμωμένα · ἐμαθα τὸ κακὸν τὸ ἐποίκες τῆς ἡγαπημένης μας κυρᾷ Τζουάννας Λαλεμᾷ · διὰ τοῦτον τασσόμαι σου, ὅτι ἀνισῶς καὶ ἔλθω εἰς τὴν Κύπρον με καταβγοδιὸν βοηθῶντος θεοῦ, θέλω σοῦ ποίσειν τόσον κακὸν ὅπου νὰ τρομάξουν πολλοί · διὰ τοῦτον πρὶ νὰ ἔλθω ποῖσε τὸ χειρότερον τὸ νὰ μπορίσῃς. "The king wrote to the queen, 'I have heard of the wrong you have done my beloved lady Jeanne Lalema; therefore I promise you, that, if perchance I shall fortunately come back to Cyprus with the help of God, I shall do you so much harm that many will be frightened; therefore before I come do the worst you can.'" In these words καταβγοδιὸν represents the modern κατευόδιον. We may notice the form ἐποίκες = ἐποίησας or πεποίηκας, and the future θέλω ποίσειν, in which the infinitive is still retained unchanged.

M. Sathas' Prolegomena will be read with interest by all students of mediæval Greek history. But we cannot help thinking it very desirable that a competent scholar should publish in some historical journal a résumé of the historical information contained in this work, for we are afraid that but very few historians possess either a sufficient knowledge of Greek or patience enough to find their way through these volumes. We can here merely draw attention to M. Sathas' works, which deserve the highest praise; but in the interest of historical students we could wish that the editor had added a Latin or French translation of the Greek originals published

by him. This would no doubt have increased the bulk of his volumes, but would also have facilitated their circulation. In conclusion we may express the hope that M. Sathas will long retain the remarkable vigour and freshness of mind and body which alone enable him to carry out his very laborious and patriotic undertakings.

W. WAGNER.

Essai d'une Classification du Syllabaire Assyrien. Par E. de Chossat. Paris: Maisonneuve & C^{ie}. 1873.

WE welcome the appearance of another work to facilitate an acquaintance with the Assyrian Syllabary. Ménant's book is too cumbrous and imperfect; Schrader only professes to reproduce the native syllabaries already lithographed, with the addition of the most necessary characters; Norris's list of signs is intended merely for those who wish to use his Dictionary; and Smith's Syllabary gives only the Assyrian forms of the characters, while many of their values are omitted, and phonetic and ideographic powers are mixed together. A new work on the subject, therefore, was greatly needed. But M. de Chossat's Essay is extremely disappointing. His method of arrangement, though unscientific, may be found practically useful, in spite of the separation of variant forms of the same character necessitated by it; but it seems to me that he has rushed into print with a very meagre knowledge indeed of Assyrian. The inscription of Samas-Rimmon, or, as he calls him, Samsi-hu, is the only one which he seems to have looked at for himself: everything else is derived from MM. Oppert and Ménéant. He states in his Preface that "the works he has chiefly used for his *brochure* are those of MM. Ménéant, Oppert, and Lenormant": but there are few traces of the last-named *savan* to be met with. It would have been well had Lenormant's *Etudes Accadiennes* been consulted; and better had the author referred to Schrader's monograph on the Decipherment of the Inscriptions, and Smith's Syllabary with the supplementary values given in the Appendix of my *Assyrian Grammar*.

A slight perusal of the book will justify the charge I have brought against it. There is not a page which does not require corrections and additions. To say nothing of omitted characters, some of them common enough in the tablets, there are few signs which ought not to have additional phonetic or ideographic values attached to them. Taking the first page, for instance, we miss in the first character the value of *kharrā* (= *samu* "heaven"), while the ordinary meanings of "sitting" (*asābu*), "seizing" (*tsabatu*), and "channel" (*nakbu*) which belong to the second are all wanting. These omissions, however, might be forgiven, considering the extent of the Assyrian syllabary; but what shall we say of a writer who does not know the characters he undertakes to explain? Thus on p. 5 *sal* and *lim* or *si* are confused together, *si* being further read as *su*, thus falsifying a verbal form; in p. 15 *ba* and *cu* are similarly confounded; and *muk*, *kak*, and *ni* on p. 16. On p. 35 *lim-nu* ("destructive") is read as a single compound ideograph: *takk* is given as *hapik* (p. 84); 90 as "eighty" (p. 23); and the character rightly translated "altar" nowhere has its usual phonetic values of *bar* or *sar*, the latter value being ascribed to a different character in p. 89. The mistakes of modern copyists and printers are attributed to the authors of the inscriptions, and we have imperfect copies given as variant forms of a character, as in the case of *ri* (p. 17), or *niv* (p. 24), where, by the way, two distinct characters (*niv* and *iz*) are further confused together, and the first translated "world" instead of "high."

But M. de Chossat's ignorance of the inscriptions is

shown in another way. He tells us that *lit* signifies "month" or "moon" (p. 13). Had he referred to the native syllabaries, he would have found that when the character had this meaning, it was sounded (in Accadian) *ab*. So, again, the variant reading *tir-tsi* proves that we must read *tar-tsi* and not *khats-tsi* "in the presence of" (p. 9). *Kas*, moreover (p. 17), never had the value of *kis*, or the signification of "multitude," but denoted "two." Similarly *ti* or *sil* (p. 23) was "life" not "serpent"; so was *tir*, which M. de Chossat persistently renders "langue"; and *sap* (p. 62) was not *sipir*, and *mā* (= *ellippu* "ship") not *sik* (p. 28). It is the same sign as that which is erroneously given as *dir* (p. 39), the true representative of *dir* being, by way of compensation, described as of "unknown assimilation" and a reference given to Samas-Rimmon's inscription, as though it were not met with elsewhere. The same page (39) is disfigured by an extraordinary confusion of the two characters *dan* and *tak*.

After this, it is not surprising that M. de Chossat is unable to proceed as soon as his modern guides fail him. The common character which is said to be "cited by M. Ménéant as of unknown value" (p. 45) has the phonetic powers of *dur* and *zicum* and the ideographic powers of *apru* ("running water") and *samu* ("heaven"), and is identical with the "completely unknown" sign of p. 31, which occurs in a royal name, no longer read by M. Lenormant, be it observed, as *Urkhammu*. A syllabary renders *gistin* (p. 34) by *caranu*, and the word is frequently found with the meaning of "vine." The mysterious letter which puzzles the author in p. 71 is *kit* or *ge*, the Accadian postposition; and the "unknown" sign of p. 33 is *mu* or *sum* (identical with that at the top of p. 18) and is not found only in Samas-Rimmon's inscription. But I cannot understand how the ordinary prefix of "limb" can be described as of "unknown signification" (p. 58), or how *silulu* "the south" (p. 51) can have the same note attached to it. Indeed the latter monogram fares badly: in p. 58 it is given as "north," and *s'ur*, "the north" as "south," the additional information being vouchsafed that the one is literally "(plaga) sinistra" and the other "(plaga) dextra"! The most amusing instance of the blind acquiescence with which the author follows his guides is when he prints the two common characters *ik* (61) and *kan* (p. 80) in capitals, and refers to the "Inscription of Khammurabi," as if they occurred nowhere else, simply because M. Ménéant, in his excellent monograph on that inscription, has so transliterated them because found in a compound ideograph the Assyrian reading of which was *khigallu* "canal." I do not know whence he derived his idea of transliterating *ecilu* "a field" by *kharran* (it ought to be *kharranu*) and rendering it "rock," "inscription" (p. 11); but M. Oppert will not thank him for being made answerable for the astounding assertion that the Accadian *a-ab-ba* "the sea" was the Assyrian *sadu* "mountain" (p. 10), nor do I think that that scholar will maintain his former opinion that *mat kurra* "the land of the East" or "Elam" was "Shinar or Mesopotamia."

M. de Chossat's knowledge of Assyrian Grammar is as imperfect as his knowledge of the Syllabary, and this makes the sprinkling of Hebrew and Ethiopic in his book appear somewhat affected. Thus he asserts that *su* is "the equivalent" of *s'u* "as the suffixed pers. pron. of the third pers." (p. 37), whereas this can only happen after *s'* or *t*, and in p. 88 the enclitic conjunction *va* is taken to be a part of the verb. It is to be hoped that he will devote more time to the study of the inscriptions before he again writes upon the subject, and that his next publication will not be printed in autograph. A protest ought really to be raised against this detestable practice which is coming into vogue among French

authors. Even with a clear handwriting, autograph is trying to both eyes and patience; and M. de Chossat's handwriting is not always clear. A book of reference, moreover, is the last thing in the world to be printed in this manner; and however good the Syllabary might have been, most of its value and usefulness would have been destroyed by the form in which it has appeared. It is not desirable to perpetuate such clerical errors as *nahbar* for *nabkhar* (p. 9), *num* for *nun* (p. 30), *a-la-sa* for *al-la-sa* (p. 12), *kuptuv* for *cabtuw* (p. 88), or *naham* for *nakam* (p. 92).

A. H. SAYCE.

THE ANNALS OF THE BAMBOO BOOKS.

IN *Professorial Dissertations of Univ. Coll.* (1872-3) there is an interesting paper by Prof. Holt on Dr. Legge's translation of the Chinese work known as the Annals of the Bamboo Books. This ancient Record is said to have been discovered in the tomb of Seang, King of Wei, who died B.C. 295, and purports to contain among other documents an authentic History of the Empire from the time of Hwang-te (2697 B.C.) down to the death of Seang. The practice of fastening a claim to great antiquity on books by no means entitled to that distinction, by announcing them as treasure-trove from the walls of old buildings or the tombs of ancient monarchs has not been uncommon in China, and the history therefore of the discovery of the Bamboo Books must be received with caution, since it is impossible that we can have any direct evidence in support of it. The opinions of native scholars have been much divided on the subject, but as Dr. Legge points out, Too Yew, an eminent contemporary writer, mentions that his attention was drawn to the Annals shortly after they were reported to have been found; they received also due recognition in the Imperial Catalogues of the Suy and Tang Dynasties, and they have found numerous editors in all ages down to the present time. If then we take their authenticity for granted, they not only form, as Mr. Holt remarks, "the most ancient record of Chinese History which has been handed down," but they also contain much of great historical interest as showing the height of civilisation and power which the Chinese of that distant day had reached. For instance, during the period B.C. 2697—B.C. 1000 we read "of caps and robes, and of chariots or carriages drawn by horses. Sacrifices are mentioned; the heavenly bodies are delineated; calendaric calculations are invented, and natural phenomena observed; music is composed, and dancing instituted; architecture is studied, and temples and palaces are erected; the Empire is divided in Provinces; dykes are constructed to restrain the overflowing of the great rivers; orders of nobility, from princes to barons, are established. We read of standing armies, of a minister of works, of a college, and a code of punishments; while such is the fame of the Empire that representatives from a distance as great as India come to pay homage and bear tribute."

It is also interesting to observe that supernatural phenomena are frequently associated with the births and deaths of the earliest Emperors, and of the rise and fall of the successive Dynasties. In the majority of instances particular stars, sometimes associated with rainbows, were seen announcing the entry into the world of the first rulers of China. "As regards the stars," Mr. Holt remarks, "we find that amongst her other titles, Ishtar was called the Queen of the Stars, and Ishtar was one of the names given to the Celestial Virgin Mother by the Assyrians, being also identical with Astarte, Venus, Ceres, Juno, the Moon, and other names too numerous to mention here, but all representing the idea of maternity. Nor is it a fact of common interest to know that to this very day the Virgin Mary is honoured in the Basque Provinces under the name of Astarte." When at the age of a hundred the Emperor Hwang-te finished his course on earth, we are told that the ground was rent and he was taken up to Heaven on a Dragon,—a legend which may possibly have given rise to the general custom in China at the present day of never speaking of the decease of an Emperor as of his death but as of his translation to Heaven. Mr. Holt has done good service by introducing the subject of these records. There is much in the ancient Annals of China to repay careful study, and the time has now fully arrived when the attention of Sinologists should be directed to placing them within the reach of the European public. ROBERT K. DOUGLAS.

Notes and Intelligence.

We learn with satisfaction that M. Adolphe Neubauer, late of Paris, who has for some years past been engaged in cataloguing the Hebrew Collection in the Bodleian Library, has been nominated to the office of sub-librarian in that institution: and that this nomination was approved by Convocation on Thursday last. M. Neubauer is already well known as one of the first of Talmudical scholars; and we trust that his new appointment may give him leisure to finish his valuable work on the Talmud, of which the first part, "*La Géographie du Talmud*," was

"crowned" by the French Academy. Besides innumerable smaller works in various languages, M. Neubauer is bringing out for the Delegates of the Clarendon Press the important dictionary of Abulwalid from the Bodleian MS. The University of Oxford has already shown its sense of the value of its new sub-librarian's services by conferring upon him the degree of Master of Arts by diploma, an honour which has only been conferred on two other persons within recent times, Dr. Johnson and Mr. Robert Browning.

We are glad to learn that M. Antoine d'Abbadie, the well-known Abyssinian traveller, is preparing for publication a Dictionary of the Amariña language (usually, but incorrectly, called Amharic). The best dictionary of the language now available is Isenberg's; and scarcely a page of this is free from blunders and omissions.

Egypt is generally regarded as the original home of the beast-fable, which is found in papyri as old as the XVIIIth Dynasty, although Mr. Mahaffy has suggested that, like animal-worship, it was really introduced into Egypt from the Nigritian aborigines. Mr. G. Smith, however, has found three fragments of a collection of beast-fables which belonged to a certain Assyrian city. One of these represents a dialogue between the horse and the ox, another between the eagle and the sun. They might have been borrowed from the Egyptians; but this is not very likely; and we should rather suppose that the fable was the independent creation of more than one despotically-ruled people.

The meetings of the Philological Society will begin again on the 7th of next month, when four short papers will be read: 1. on *Cursor Mundi* by Dr. Morris; 2. on the *Priores's Nun-Chaplain in Chaucer* by Mr. Furnivall; 3. on the name *Beowulf* by Mr. Sweet; 4. on the *Creole Language* by Mr. Thomas. Among the later papers promised may be mentioned *On Comparative Dialectical Phonology* by the President, Mr. Ellis; three papers on *The History of English Sounds* by Mr. Sweet; and an important one by Mr. Murray on *The Classification of the Early English Dialects*. Most of the papers are on points connected either with English philology or phonetics. The only one which deals with a classical subject is Prof. Key's paper *Corrections of the Text of Terence*. Oriental philology is only represented by a paper by Prof. Rieu *On Persian and its Affinities*. The Programme is, however, not yet entirely filled up.

Contents of the Journals.

Zeitschrift für vergleichende Sprachforschung, xxi. 4, 5.—Fr. Haefelin: Treatises on the Romance dialects of South Western Switzerland. [The first of a series, beginning with the dialect of Neuchâtel: contains a full account of the vowel-system in its relation to Latin.]—Leo Meyer: On "Vocalsteigerung" especially in the inflexion of the Verb. [Endeavours to limit the cases of *Vridhhi* in Sanscrit, and to show that it is not a further stage of Guna but a distinct and specifically Indian product.]—The same: *ḥkaeros*—*Fekaros*. [As against *fekaeros* or *sekaeros*, the former being proposed by Benfey and Curtius, the latter by Ahrens. The traces of *j* and initial *σ* in Homer are more than doubtful, and *Fekaros* is now found on the Locrian inscription discussed by Allen in *Curt. Stud.* iii. 205 ff.]—A. Fick: Contributions to etymology. [Old Irish words—*lár*, *ithemair lanmair*, *aig*, *cnam*, *ciad*, *folcaim*.]—G. Gerland reviews Gerber's *Die Sprache als Kunst*.—B. Delbrück reviews Ludwig's *Agglutination oder Adaptation?* [unfavourably.]—Ernst Windisch: On Fick's Comparative Dictionary of the Indo-Germanic Languages. [Three articles: (1) criticising the plan, especially the arrangement of words under seven hypothetical "Grundsprachen," which the reviewer thinks inadvisable in the present state of knowledge; (2) on the roots *ank*, *nak*, and on the syllable *na* inserted in the Sanscrit conjugation; (3) Celtic etymologies, chiefly words meaning "to see," a sort of supplement to the Celtic part which Windisch contributes to the new edition of Curtius' *Grundzüge*.]—H. Schuchardt: Romance Philology. [Reviews of recent articles in other periodicals.]—A. Fick: Contributions to etymology. [On (1) *invitus*, *invitare*, and (2) *Ποσειδᾶς*, Poseidon, and the Vedic *idaspati*, "Lord of swelling."]—K. G. Andresen: Old German *hl* and *hr* retained in Proper Names as *gl*, *kl*, and *gr*.—Wenzel Burda: On the etymology of *Ἰαπασία*.—Leo Meyer, *Edw*—*ēfaw* from *sefaw*.—G. Gerland: Review of Kleemann's *Glossae Criticae*. [Careful and intelligent.]—Ernst Kuhn: Review of Joh. Schmidt's paper, *Die Verwandtschaftsverhältnisse der indogermanischen Sprachen*. [A remarkable attempt to prove continuous transition as against the theory of "Grundsprachen," especially of distinct Aryan and European "Grundsprachen."]

Zeitschrift für vergleichende Sprachforschung, xxii. 1.—Gustav Meyer: The Dvandva compounds in Greek and Latin. [Admits a very few late words to be so, e.g. *νυκθήμερον*.]—Leo Meyer: *ἰκνέουαι* and connexion. [Shows that the root means "to reach," not "to come," and connects it with Sanscr. *acnōmi*.]—The same: *θεορρόπος*. [From the root *praç* "to ask."]—The same: On some German pronominal formations.—H. Schuchardt: Review of Giuseppe de Rada, *Grammatica della lingua Albanese*. [Treats of the Albanian dialect spoken in Calabria as the Albanian *kar' ἑξοχῆ*. The reviewer points out much that

is defective in the work.]—H. Weber: Lithuanian *ang* = Germ. *ang*.—Martin Arnesen: Norwegian names of places testifying to ancient games.—The same: Names in *bern* in Frisian and North German.—A. Fick: Contributions to etymology. [Ecclesiastical Slavonic *pasi-t* and Old Norse *spak-r*: *sp* "early," Goth. *air* "early;" Zend *ajare* "day."]

New Publications.

- ABUL-BAKÂ IBN JA'IS'. Commentar zu dem Abschnitte ü. das Häl aus Zamachs'ari's Mufassal. Hrsg. etc. v. Dr. G. Zahn. Halle: Waisenhaus.
- CHABAS, F. *Mélanges égyptologiques*. Troisième série. Tome ii. Paris: Maisonneuve.
- DACHERT, H. Ueber das 1. 2. und 11. Buch der Sibyllinischen Weissagungen. Frankfurt-a-M.: Völcker.
- DECKE, W. *Facere* und *fieri* in ihrer Composition m. andern Verbis. Strassburg: Trübner.
- FRAGMENTA scenicae Romanorum poësis, secundis curis recensuit O. Ribbeck. Vol. 2. Comiorum fragmenta. Leipzig: Teubner.
- GEMÂLEDDÎNI Ibn Hisâmi commentarius in carmen Ka 'bi ben Zoheir Bânât Su' âd appellatum. Ed. J. Guidi. Pars 2. Leipzig: Brockhaus.
- HEYMANN, W. Das 1 der indogermanischen Sprachen gehört der indogermanischen Grundsprache an. Göttingen: Rente.
- HOFFMANN, E. Die Construction der lateinischen Zeitpartikeln. 2 umgearb. Aufl. Wien: Gerold's Sohn.
- KAMMER, A. Die Einheit der Odyssee nach Widerlegung der Ansichten v. Luchmann-Steinthal, Koehly, Hennings, und Kirchhoff. Leipzig: Teubner.
- KUGLER, K. Erklärung v. 1000 Ortsnamen der Altmühlalp u. ihres Umkreises. Eichstätt: Krüll.
- MÉNANT, J. *Leçons d'épigraphie assyrienne professées aux cours libres de la Sorbonne pendant l'année 1869*. Paris: Maisonneuve.
- MIKLOSICH, F. Ueber die Mundarten und die Wanderungen der Zigeuner Europas. iii. Wien: Gerold's Sohn.
- MUSSAFIA, A. Beitrag zur Kunde der Norditalienischen Mundarten im 15 Jahrh. Wien: Gerold's Sohn.
- PIERRET, P. *Études égyptologiques, comprenant le texte et la traduction d'une stèle éthiopienne inédite, et de divers manuscrits religieux, avec un glossaire égyptien-grec du Décret de Canope*. Paris: Franck.
- Q. HORATHI FLACCI carmina lyrica ex intimae artis criticae praeceptis emendata edidit et commentariis criticis exegeticisque instruxit N. G. Ljungberg. Vol. i. Lund: Gleerup.
- SAVELSBERG, J. *Umbrische Studien*. Mit neugewonnenen Aufschlüssen über lateinische Nominalsuffixe, und die abgeleiteten Conjugationen auf—(a) o,—eo—io. (Reprinted from the *Zeitschrift für vergleichende Sprachforschung*.) Berlin: Dümmler.
- SCHADE, O. *Altdeutsches Wörterbuch*. 2 Aufl. 1 Hft. Halle: Waisenhaus.
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ERRATA IN No. 82.

Page 390 (b) 36 lines from bottom, for "did not occur" read "occurred."	
" " " 25 " " " "Langerhaus" read "Langerhans."	
" " " 21 " " " "ammocaetes" read "ammocoetes."	
" " " 8 " " " "Hauben?" read "tufts."	
" 391 (a) 7 " top " "Brown-Seguard" read "Brown-Sequard."	
" " " 16 " " " "musculatim" read "musculature."	

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 83.

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No. 84.] REGISTERED FOR SATURDAY, NOVEMBER 15, 1873. TRANSMISSION ABROAD. [Price 6d.

General Literature.

Traditions and Hearthside Stories of West Cornwall. By William Bottrell. With Illustrations by Mr. Joseph Blight. Second Series. Penzance: Printed for the Author by Beare & Son.

THE first series of this collection, published in 1870, introduced Mr. Bottrell to us as at the same time a good story-teller and a careful and accurate student of his native county, so that it may be hoped that the continuation of his labour of love will meet with the same recognition as that bestowed upon the first part, and this not only on account of the generally attractive substance of the separate tales, but also because of the clear and vivid pictures which they give us of the country and the people whence they are taken. Still the profit to be gathered for the comparative study of folklore is less considerable than might have been expected, partly on account of the character of the matter narrated, which sometimes borders closely upon real events and sometimes actually contains them. Thus it happened that the first series contained little that could be connected with a wider circle of popular conceptions; as for instance the history of *The old wandering Droll-teller of the Lisard and his story of the Mermaid and the Man of Cury*, and the one of *Nancy Trenoweth, the fair daughter of the Miller of Alsia*, part ii., the conclusion of which, pp. 201-3, belongs to the widely spread legendary cycle made familiar by Bürger's *Lenore*. In this respect, however, Mr. Bottrell's new collection is somewhat richer than its predecessor. Thus the substance of the first paper, *Duffy and the Devil, An old Christmas Play*, is taken, as the author has forgotten to remark, from two well-known folk-tales, and in such a way that the first part corresponds to *Rumpelstiltschen*, Grimm No. 55, and the remainder from p. 23 onwards, to Grimm No. 14, *Die Spinnerinn*, thus reversing the connection that we find in the French nursery tale *Ricdin Ricdon*, where the introduction agrees with the latter and the conclusion with the former of the two German tales. Upon these see Köhler's Notes on Laura Gonzenbach's *Sicilianische Märchen*, No. 84, "Die Geschichte vom Lignu di Scupa," and Henderson's *Notes on the Folklore of the Northern Counties of England*, pp. 221-6, with Mr. Baring Gould's remarks, the references in which, minus the misprints, are all, without exception, taken from Grimm. It is interesting in other respects to find a subject of the kind worked up into a

Christmas play, a circumstance of which, as I believe, but few examples are to be met with, and which alone would give no slight interest to Mr. Bottrell's work. The West Country Droll, *Tom of Chyannor, the Tin-Streamer* (p. 77 sqq.), relates how Tom is offered by his master, instead of his three years' wages, four pieces of wisdom; he accepts the offer and fares well by following the advice given. The first counsel is: "Take care never to lodge in a house where an old man is married to a young woman;" the second: "Take care never to leave an old road for a new one;" the third: "Never swear to anybody or thing seen through glass;" the fourth: "Be thrashed twice before consent once." This tale, another Cornish version of which, translated from Lhuyd's *Archæologia Britannica*, p. 251, was given in *Blackwood's Magazine*, May, 1818, is to be met with also in Tyrol, the South of France, Sicily, and Spain; see Gonzenbach's *Sicilian. Märchen*, No. 81, "Die Geschichte von den drei guten Rathschlägen," with the notes; also Gradi, *Pasqua di Ceppo*, Turin, 1870, p. 83: "I tre consigli del Dottore"; but especially *Gesta Romanorum*, cap. 103: "De omnibus rebus cum consensu et providentia semper agendis;" for this is the oldest version known at present where the three counsels (*sapientias*) are as follows; the first: "*Quicquid agas, prudenter agas, et respice finem*;" the second: "*Numquam viam publicam dimittas propter semitam*;" the third: "*Numquam hospicium ad manendum de nocte in domo alicujus accipias, ubi dominus domus est senex et uxor juvencula*." I have already pointed out (Ebert's *Jahrbuch für Roman. und Englische Liter.* iii. 154) that the first piece of advice is derived from the moral of Aesop's fable "The Fox and the Grapes" (Kor. 4. Halm 45). In Mr. Bottrell's version of the tale, Tom receives in addition as a present from his master's wife a small stone "of great virtue; it will preserve any woman that weareth it from much trouble if she but keepeth it in her mouth, with her lips closed, that it may not drop out when her husband or any other contendeth with her;" and the virtue of this stone is proved by experience. This also is the version of a well-known anecdote told of Saint Augustine's mother, Saint Monica, who had a very irritable husband, and to avoid disputes, whenever he reproached her, used to take water into her mouth and keep it there till his passion was spent. Hence too the French proverb: "Il faut faire comme Ste. Monique, mettre de l'eau dans la bouche." This original

version, which I have also met with in Italian works, is better than the Cornish one, for the stone might be lost, while water is to be found everywhere.

The story of the Piskey, the industrious household spirit who has new clothes given him instead of his old rags, and thereupon leaves the house for ever, exclaiming: "Piskey fine and Piskey gay,—Piskey now will run away" (p. 168 sq.), is to be met with, not only in other parts of England,—as in Devonshire, where the Pixies exclaim: "Now the Pixies' work is done,—We take our clothes and off we run" (*Athenæum*, 1846, p. 1092), and in Scotland, where the last Brownie known in Ettrick Forest resided in Bodsbeck and exercised his functions undisturbed till the scrupulous devotion of an old lady induced her to hire him away, as it was termed, by placing in his haunt a porringer of milk and a piece of money. After receiving this hint to depart, he was heard the whole night to howl and cry, "Farewell to bonny Bodsbeck!" which he was compelled to abandon for ever (Walter Scott, *Introd. to Minstrelsy*);—it is also at home in Germany, see Adalb. Kuhn, *Westphäl. Sagen* i. 157-8, No. 163. No one will be surprised at such a wide dissemination of legends and other narratives, as innumerable similar examples lie before us; but I cannot refrain from adding one more instance, suggested by Bottrell's mention (p. 274) of William Noy, the Attorney General of Charles I., who belonged to a Cornish family. It is related of him that his rise originated in a case which is very well known, that of *the three graziers*. At a country fair they had left their money with their hostess while they went to transact their business. A short time after, one of them returned, and under pretence that they had occasion for the whole money, received it from the hostess and made his escape with it. The other two sued the woman for delivering that which she had received from the three, before the three came and demanded it. The cause was tried and a verdict found against the defendant. Mr. Noy, who was then making his first appearance at the bar, requested to be feed by the woman, saying that he thought he could still bring her off. He then moved an arrest of judgment, stated that he was retained by the defendant, and that the case was this. The defendant had received the money from the three together, and was certainly *not to deliver it until the same three demanded it*. She asked for no other condition, *let the same three men come, and it shall be paid*. This motion altered the whole course of proceeding, and according to Lloyd, in his *State Worthies*, brought Mr. Noy into notice (*The Percy Anecdotes*, *Anecdotes of the Bar*, Lond., Warne & Co., p. 311). I can scarcely believe that this case really occurred, for it exists in two other older versions; one in Val. Max. vii. 3, ext. 5, where Demosthenes takes the place of Noy, and again in the Greek Syntipas, the Seven Viziers, &c., which last version, and doubtless also the first, is derived from the East (cf. Benfey's *Pantschat* i. 287). According to the narrative in Syntipas, the merchants give a purse in charge to a woman with the injunction only to restore it when they were all three together. They are then going to the baths, and send one of their number to borrow a comb from the woman. He, however, asks her for the purse, and when she refuses, the others call from a distance, "Give it him." The third then decamps with the money, and the woman refuses to make it good. A boy of five years of age sees her complaining in the street, and promises to put an end to her grief. On his advice she goes to the judge and promises to give back the purse, but does not do so when only two appear to claim it. We need not be surprised at finding that in the course of its wanderings the clever counsel came to be laid to the credit of Noy, as we also find it fathered upon a duke of Ossuna (see Leroux de Lincy, *Essai sur les fables indiennes*, p. 121).

To return to Bottrell, I should notice the very remarkable harvest custom (p. 200) in accordance with which "the last handful of wheat, called 'the neck,' was tied up and cut by the reapers throwing their reap-hook at it. Then it took a good bit longer to cry the neck according to the old custom of the harvest hands dividing themselves into three bands—one party calling three times as loud as they could cry, 'We have it, we have it, we have it!' the second demanding, 'What have ye? what have ye? what have ye?' and the third replying, 'A neck! a neck! a neck!' Then all join, hats in hand, in a 'Hip! hip! hurrah!' The neck was then decorated with flowers and hung over the board." This custom is to be met with in many places in England and Germany, see Simrock *D. Myth.*, p. 563 (3rd ed.), Kuhn and Schwartz, *Norddeutsche Sagen*, p. 514 sqq.; from the latter of which I cite the following references: Brockett's Gloss. of North Country Words sub voc. *Melldoll*, Grose, s. v. *Kernbaby*, Halliwell s. vv. *Mare* and *Mell*; *Monthly Mag.*, vol. xxxvii., "Reaping in Devonshire." The figure made of the last sheaf doubtless betokens a divinity, sometimes male, sometimes female, and bears different names. In West Cornwall, as we see, it is called *Neck*. Is this by any chance the same as *Nick*? Grimm (*Myth.*, pp. 456-7) is inclined to identify this name with *Nikarr*, i.e. Odin, and in fact, in a Yorkshire harvest dance, there appear a giant and his wife who are called *Woden* and *Frigga* (Grimm, p. 280 sq.; communicated by Kemble and taken from the mouth of an "old Yorkshireman"). That the old God should come as *Old Nick* to pass for the devil will surprise no one who knows how anxious the first missionaries were to bring about such a degrading transformation. Another noteworthy Egyptian harvest custom may be added to those hitherto quoted, from Diodor. i. 14: "Μαρτύριον δὲ φέρουσι τῆς εὐρέσεως τῶν εἰρημένων καρπῶν τὸ τηρούμενον παρ' αὐτοῖς ἐξ ἀρχαίων νομίμων. Ἐπεὶ γὰρ καὶ νῦν κατὰ τὸν θερισμὸν τοῖς πρώτοις ἀμνηθέντας στόχους θέντας τοὺς ἀνθρώπους κόπτεσθαι πλησίον τοῦ ἐράγματος, καὶ τὴν Ἰσιν ἀνακαλεῖσθαι καὶ τοῦτο πράττειν ἀπονέμοντας τιμὴν τῇ θεῇ τῶν εὐρημένων κατὰ τὸν ἐξαρχῆς τῆς εὐρέσεως καιρὸν." Thus at the time of Diodorus there was still subsisting the ancient custom, according to which the reapers used to set up the first sheaf that was cut, and then begin to wail and call upon Isis. In this case the deity invoked is a goddess. It is only strange that thanks for the discovery of the cultivation of cereals should have survived in the shape of a mourning cry; or was this considered partly as a testimony of sympathy for her loss of Osiris as well as a token of honour? However that may be, there is an obvious analogy between the old Egyptian harvest custom and those still existing at the present day, in connection with which it may be noticed that in Germany the goddess Freia formerly appeared as Isis, and that it was probably in honour of her that a plough was carried about (Simrock, *Myth.*, p. 354).

Equally deserving of attention is what the author has to say respecting the so-called *Crick-stones* (p. 242), "In a croft belonging to Lanyon farm, and about half a mile north of the town place, there is a remarkable group of three stones, the centre one of which is called by antiquaries the Men-an-tol (holed stone) and by country folk the Crick-stone, from an old custom—not yet extinct—of 'crameing' (crawling on all fours) nine times through the hole in the centre stone, going against the sun's course, for the cure of the lumbago, sciatica, and other 'cricks' and pains in the back;" and further on: "The Tolmen in Constantine parish, and holed stones in other parts of the county, were used the same way as Lanyon Crickstone for curing various ailments. To cure boils and rheumatism, persons 'crame' nine times against the sun under a bramble growing at both ends." For the explanation of this usage, cf. my edition of

Gervasius of Tilbury, p. 170 sq., where I have shown by reference to European and Indian customs that the practice of dragging the sick head foremost and naked through hollows in the ground, through hollow stones, split trees, and under brambles growing at both ends, was symbolical of rejuvenescence or a new birth. Further remarks on the same subject I have given in Bartsch's *German*. xvi. 226.

In another passage Bottrell relates (p. 248) that two men who were at harvest work in a field belonging to a dying wrecker, near the sea, heard a hollow voice as if coming from it, which said, "The hour is come, but the man is not come." This exclamation recurs in numerous legends of Scotland and Germany, and always in connection with water spirits, as I have pointed out on the occasion of a similar legend from the South of France, given by Gervasius of Tilbury (pp. 39, 136), in which the water spirit of the Rhone cries out: "Hora praeterit et homo non venit!" This cry refers without doubt to the human sacrifices which in the period of heathenism in Europe used to be offered at stated times to the water spirits, so that when they were abolished, the enraged spirits used, according to popular belief, to utter this cry at the accustomed time to demand their victim. The expression "the river spirit claims its yearly sacrifice" is still used at times when men are drowned in a river (Grimm, *Myth.*, p. 462). In one of Callaway's Nursery Tales of the Zulus there is a passage referring to a similar subject (pp. 342-3), where we read: "So it was then among the Amakxosa, two damsels, one was the daughter of a chief, looked into a pool. They were drawn and went into it; it was as though they were called.....the beast did not let her go until they cast in two black hornless oxen; then it left her and ate them." Perhaps in this case also we have to do with traces of a sacrifice formerly offered to the waters or to the animals inhabiting them.

I come lastly to a singular expression used in West Cornwall: "to be hilla-riden" and "to have the stag" are the only names known to old country folks for the "nightmare" (p. 236). As to the meaning of *hilla*, it seems to me to be equivalent for *Hilda*, *Holda*, *Holla*, under whose leadership the witches ride abroad at night upon beasts, so that in many parts of Germany the *Hexenfahrt* is called the *Hollenfahrt* (Simrock, *Myth.*, p. 454). It is known from many legends that witches sometimes transformed sleeping men into animals upon which they used to ride to their meetings (Henderson's *Folklore*, &c., p. 154 sqq., and *Academy*, No. 80, p. 344). For *Hulda* see further Simrock, l. c., p. 323, where there is also mention made of a stag, who leads to the lower world, and perhaps also to the explanation of the Cornish *stag*. Finally, as to the *Legend of Pengersee* (p. 251), as Bottrell observes, it contains "what may seem to many mere childish fancies." They point perhaps to some of the late French rhymed or unrhymed *Romans de chevalerie* as their source, in which the like absurd adventures are often tacked together in the same senseless way. Yet the beginning of the Cornish narrative is not quite without interest, where it relates that a lord of Pengersee once started for the East in quest of adventures, there had a love affair with a princess, but abandoned her, and marrying in his own country had a son; after which his son by the princess came to Cornwall, but returned again to his own home and became a king there, &c., &c. This introduction to the legend bears a distant resemblance to the beginning of Wolfram von Eschenbach's *Parzival*, where Gahmuret of Anjou in like manner betakes himself to the East in search of adventures, has a son of the name of Feirefiz by the Queen Belakane, then leaves her and marries the queen of Wales, who makes him father of Parzival; after which Feirefiz comes to the West to his brother, but does not remain there, and finally becomes king of India,

and so on. Apart from this general resemblance, the details and the whole remaining course of the two narratives are entirely different, so that even if there is any real connection between them, to establish it clearly it would be necessary to discover the original source of the Cornish legend; for in its present form, as already observed, it is mixed with many later and for the most part silly additions. But it would be no slight matter if we had come here upon a trace, even though a slight one, of an hitherto unsolved riddle, the sources of Wolfram's *Parzival*!

FELIX LIEBRECHT.

Gabriel Denver. By Oliver Madox Brown. Smith, Elder, and Co.

IN literary art, as in other art, there are two things to be desired—beauty of conception and skill of execution; and an artist is radically incomplete who does not aim at both, and does not attain to both in the maturity of his talent. But before the talent is mature, to be incomplete is pardonable, and we are all in the habit of accepting, not to say expecting, a particular kind of incompleteness. We are satisfied with the promise of a young artist who has an eye to ideal effects, and some power of producing them, even if he has little or no knowledge of the technical effects and no desire to escape his ignorance. Mr. Oliver Madox Brown is undeniably a young artist, and his book has its full share of the incompletenesses and crudities of youth; but his technical aspirations are already as well marked as his ideal aspirations; and both the one and the other have frequently a considerable measure of success.

Gabriel Denver is the son of an English father and a Portuguese mother, who is left with a sister and cousin (the cousin has Portuguese blood in *her* veins). He speculates, and loses money; his sister lends him enough to prevent his ruin. When she marries he borrows of the cousin to repay her. The cousin obtains a promise of marriage, which he has no conscious reluctance to fulfil, and the day for the ceremony is fixed. Two months before the date arrives the hero is informed of an inheritance in England: his cousin allows him to go to look after it at the expense of postponing the marriage, but determines to accompany him herself. They are the only passengers except a beautiful orphan and her aunt, who dies at the beginning of the voyage. Gabriel had met the orphan before, when she was only eleven, and came to fetch help for her father, who had been poisoned by robbers. He had only two thousand pounds then, but we learn at the end of the book that he lived long enough to make a fortune, which enables the heroine to treat the hero's inheritance of eighteen or nineteen thousand as a trifle. Of course Gabriel and the orphan fall in love, and of course the cousin will not abandon her claim. On the night of what should have been the wedding day she surprises Gabriel when he expected Laura whom he loves, and after a stormy scene fires the ship. Ten of the sailors escape in one boat from the fore-castle; Gabriel, Laura, and the cousin escape in another from the quarter-deck. After four days' exposure without food or drink, except as much water as can be collected in clothes after a shower, they are picked up by the "Albatross," which had already crossed their track once before at night when Gabriel was too hopeless to watch. Meanwhile the cousin dies mad after drinking salt water, and Laura nearly dies of hunger and thirst. After they are picked up Laura is delirious, and there is a tornado, and Gabriel is delirious and talks to his cousin's ghost and tries to throw himself overboard. They are landed at the Cape; Laura nurses him; he recovers, and they marry and live happily in Devonshire. We leave

them watching a storm at Combe Martin with their daughter, when the water is phosphorescent as it had been on the night they were left adrift and the burning ship had gone down.

It will be seen from this analysis that the situations succeed each other in the simplest and most inartificial manner possible; perhaps even this analysis is enough to show that the situations themselves are ingenious and intense; and this would certainly appear from reading the book. Only in one sense little is made of them, because the complicated situations are never worked out into the entanglement of issues that we continually suspect the author of having prepared. Gabriel abandons himself at once to Laura; Laura accepts him unsuspectingly, the cousin has no movement of generosity or even of disdain. The author spends a great deal of ingenuity in making elaborate arrangements in order that something very simple may happen. Indeed some of the ingenuity seems thrown away altogether. The escape of the ten sailors without the knowledge of the hero and heroine, and the miraculous legends which they circulate about the burning of the ship and its consequences, lead to nothing whatever; and it is doubtful whether it was worth while to suggest a parallel with the Albatross (the bird) that circles round the burning ship and perishes in the flames, and the "Albatross," the ship that circles round the castaways and very nearly perishes itself in the circles of the hurricane.

In fact the whole book leaves the reader under a curious uncertainty, whether an originally meagre story has been enriched with numerous illustrations by a very distinguished artist in words, or whether the author has had the courage to piece together the best effects to which he was led in the course of a narrative perhaps neither probable nor interesting, and to suppress the greater part of the narrative. Either hypothesis would account for the fact that the book seems unfinished as a whole, while the parts are highly finished in themselves, and with a view to their aesthetic effect on one another, though not to their inner coherency.

Within these limits the book is a very striking one indeed; there can be no doubt of the author's original power and of his sense of beauty, and there are traces of a great deal of well bestowed work, not merely in its aesthetic contrasts, but in the fulness of knowledge with which Australia and Cape scenery, and the incidents of navigation are described; and it ought to be added that with all its crudities the book is thoroughly readable from first to last. The following description of how the master of the "Albatross" first sighted the lovers and the dead cousin adrift in the boat, is a fair specimen of the weird charm and richness of the author's style:

"Just then the light of the sun broke, radiating over the stormy waters, and clearing away the dusky half-obscurity. The master of the ship obtained his spyglass and brought it to bear on the boat and its occupants. They were as yet about three miles ahead, but a strange sight was suddenly brought within two or three feet of his eye by the telescope. It was a large old-fashioned boat, wide and flat and strong. A woman was standing at one end of it, violently confronting and upbraiding a man, who knelt down, apparently leaning over some one in the bottom. Suddenly the woman dashed her arms up wildly, as though she had received a sunstroke, and then fell back in the stern-sheets of the boat. The man rose, clasping his forehead with his hands, and looking right in the woman's face, which still remained visible above the portoise. A fearful look, indicative of incomprehensible feeling (not sorrow, as could be seen even at that distance), convulsed his features, then he bent down in the boat, looking up no more, so that his face was hidden.

"They were lost for a moment in a deep hollow of the sea, and when they rose into the sunlight again, it gleamed fearfully on the woman's eyes, but she never moved to avoid it."

It is to be hoped that in another edition the master may

get his spyglass or send for it instead of obtaining it, and that a little excessive emphasis may be suppressed here and there, and that as the ship on the cover would not look well without three masts the author will retrench the assurance on page 26 that the Black Swan had only two. These of course are only superficial blemishes. A severe critic might object that the author ought to have decided whether he meant to write a novel or a prose poem, and that for want of stating the question to himself he has written neither a novel nor a poem, but a melodramatic idyll. It might be replied that perhaps a melodramatic idyll is as legitimate as most other forms of experimental art, and that at any rate this idyll is presented with so much artistic tact in essentials that whenever the author writes a real novel we may rely upon its being thoroughly poetical.

G. A. SIMCOX.

LITERARY NOTES.

There is almost always something melancholy in the old age of the greatest men, for however gracefully they may withdraw from the front rank of active workers, and however fresh their powers of perception and judgment may remain to the last, it is impossible not to compare them with themselves as well as with the ordinary mortals to whom they are still superior, and equally impossible to escape the painful consciousness of gradual decay which the comparison obtrudes. Sir Henry Holland's reputation was not of such tyrannical dimensions as to make it dangerous for him to grow old, and the powers of his intellect might not perhaps have been adequately appreciated unless their quality had been proved by their exceptional vitality. The volume of *Personal Recollections* published only last year—by the man who introduced the vaccine virus into Iceland in 1810—had an autobiographical interest quite apart from what the author had to tell of the eminent men and women whom he, who knew everybody, had known, and of the remarkable sights and places that he, who had been everywhere, had seen and visited. His life was an eloquent homily on the advantages to a man of literary tastes and moderate literary ability of following some other profession than literature. His three favourite amusements, society, travel, and the composition of Quarterly Review articles, only occupied the leisure of an active professional career, and his example might certainly be quoted in support of the deliberate opinion which he published as an octogenarian, that the faculties are much more frequently impaired by premature disuse than by the inevitable effects of old age. He himself never quite gave up practice, never lost the habit of trying to pass every pedestrian who was before him on the pavement—though he averred that the Londoners of to-day walk faster than their fathers—and never learnt to prefer the straight to the diagonal line in crossing a street, though in this respect too the lapse of time cannot have made his usual course the easier. He did not suffer from that wear of the mind from being turned inwards, of which he speaks in one place, *apropos* of metaphysicians whom he had outlived, after they themselves had survived their own powers, nor from the exhaustion that ensues when the mind has used up its own substance in original production; while his powers of apprehension remaining undiminished, he was never thrown back to live merely in memories that are constantly losing their interest for a younger generation. Of the two veterans of literary society with whom it is natural to compare him, Rogers, and Crabb Robinson, the latter was never more than a listener, a Boswell with more intelligence and self-respect, amongst the great whom he delighted to honour, while Rogers, having outlived the brilliant society in which his personal qualities secured him a place out of proportion to his literary merits, sank, and did not improve his temper by knowing that he had sunk, into the mere *raconteur*, the teller of stories that would have been excellent if he had not told them before. Sir Henry Holland, on the other hand, though on terms of acquaintance or friendship with all the notabilities of the century, did not, and from the exigencies of his profession, evidently could not have sought their acquaintance merely as notabilities; he only had the gift of making friends of those with whom he was brought naturally in contact, and of profiting by the accident, as it may be called,

that nearly all the persons with whom he was brought in contact were in some way interesting or distinguished. He was born in 1788, left school young, and for a few months thought of being a merchant, chiefly for the sake of the intercourse with distant countries kept up by commerce, but soon discovered his mistake, and began to study medicine; he wrote a short account of the visit to Iceland already alluded to, but his first publication of any importance was a volume of travels in Greece, published in 1817, and illustrated in the old-fashioned style after his own sketches; he speaks in his *Recollections* of the severity of the cold in Athens—the winter that destroyed the French army in the retreat from Moscow. After travelling for a year with the Princess Caroline as medical attendant, he established himself in London practice, making from the first a rule of keeping two months of the year free for foreign travel, of not allowing his income to exceed £5,000 a year, and of reserving leisure for society and the scientific studies in which he was interested; resolutions of which he never had reason to doubt the wisdom. His passion for travel seems to have had two main sources: on the one hand the pleasure in strange scenery which belongs more to the physical geographer than to the artist; the love of nature in her active moods, for rivers, seas, volcanoes, or the larger landscapes that tell their history to a practised eye: on the other, a taste for the intellectual sensation, as we must call it, of passing abruptly from one group of associations to another, of intensifying the enjoyment of civilized ease and rough adventure by bringing the contrasted extremes as near together in time as was possible, or by the merely mental transition from the solitude he had travelled a thousand miles to reach—and write an article for the *Edinburgh* in—to the scientific subjects of meditation he carried with him. The articles which were the fruit of this Epicurean industry were reprinted in 1862; those which the author regarded with especial affection were on the physical geography of the sea, the Atlantic Ocean, and the Mediterranean, subjects connected with many of his most interesting recollections, though it is not, we believe, in them that he speaks of what had struck him as the most impressive of spectacles, to see over a level reach of sea or desert the setting sun and the rising moon above the horizon together, with nothing between them but the uniform, unbroken surface of earth and sky. In the *Personal Recollections* he speaks of the remarkable change that had taken place within his memory in the current conception of the nature of proof, which he of course traces to the development of physical science; and without in any way disparaging his papers on strictly scientific subjects, we may trace something of the change in his own style, which is more literary, less concrete than that of a younger man would probably have been. He published two small volumes on subjects more immediately connected with his profession, in the latter of which he defended himself from the charge provoked by the former, of extreme medical scepticism; the fact seems to have been that though quite willing to accept new theories for which there was sufficient evidence, he doubted whether any part of the theory of medicine was yet so sound and complete as to dispense with the need for trained intuition and the incommunicable power of connecting symptoms too slight to be referred to the more general causes as yet alone understood. A point connected with the physiology of thought which he discusses, the relation of consciousness to time, and the possibility of *lengthening time* by quickening consciousness, suggests a qualification for a remark in the *Recollections* that men live faster now than formerly; if it is living fast to fill time full, no doubt this is true in a mechanical way, that more ground is traversed and more changes experienced in a given time; but it is a serious question whether the mind is proportionately more alert, awake to a greater number of distinct impressions than in the generation of which Sir Henry Holland was not the least distinguished, one of the most amiable, and, it is to be feared, the last representative.

By the death of the King of Saxony Europe has lost one of her foremost Dante scholars—perhaps, with the exception of Karl Witte, the most distinguished of all. The work which embodies his studies on this subject is his German translation of the *Divine Comedy*, published under the name of "Philaletes," the first instalment of which was brought out as long ago as 1823, and the work was concluded in 1848, a year of great political danger to King John, as well as to many other of

the crowned heads of Europe. The translation is in blank verse, the choice of which, in preference to any more elaborate metrical system, was rendered almost necessary by the author's desire of reproducing with photographic accuracy the details and shades of meaning of the original; and the great merit of the execution consists in the way in which this is carried through without causing stiffness or hampering the freedom of the rendering. But the value of the commentary which accompanied the translation was still greater. Up to that time hardly any satisfactory notes, either ancient or modern, existed in elucidation of Dante's historical allusions, and but little had been done even in Italy in the way of local illustration. It was reserved for the King of Saxony to investigate thoroughly the original authorities with the view of throwing light on this subject, and the results, whether embodied in notes or excursuses, are of the highest value. No less meritorious were the author's studies of the works of the Schoolmen, the knowledge of which is indispensable to the understanding of Dante's philosophy and theology; these have borne fruit especially in the notes of "Philaletes" to the *Paradiso*. Among English writers on Dante, Mr. Cayley in particular, in his admirable version in *terza rima*, has made especial use of this commentary.

In *Fraser* (Nov. 1) there is a paper by Mr. Leslie Stephen on Jonathan Edwards, in which some approach to justice is done to the singular subtlety and originality as a thinker of that little-read Calvinist divine, whose place in philosophy is between Hobbes and Spinoza, with both of whom, though he had probably read neither, he is at times almost verbally in agreement. But Mr. Stephen cannot forgive his author for having sincerely believed in hell-fire or for preaching about it to little girls of five, and what is more curious, he writes of this unfortunate doctrine as if the best reason for not believing it were—not that the evidence for its truth is inadequate but—that it would be extremely shocking for it to be true; of course Edwards thought it was both shocking and true, taking the letter of Scripture as a sufficient proof of its truth, and it seems unreasonable to blame him either morally or intellectually for not having arbitrarily rejected one of the corollaries from the theory of inspiration which he shared with most of his contemporaries. It would have been fair to add that if Jonathan Edwards' hell is grim and material, his conception of the joys of heaven is remarkably humane and spiritual. In the same number Mr. Baring-Gould gives some account of the *Acta* of S. Symeon Salos, "who became a fool for Christ," a saint of very unedifying life and conversation, who would bring more discredit on the Church which acknowledges him were it not evident—as Mr. Baring-Gould strangely fails to remark—that his legend is mythical; the lives of the Saints abound with incidents that have strayed out of popular, often Pagan, tradition, and S. Symeon is only the half witty, half malicious fool of common folk-tales, who in the Middle Ages was by no means infrequently invested with Holy Orders.

Cornhill contains an instructive account of the rise of the farmers' "Granges" and Clubs in America and the war between the agricultural and the railway interest; also some amusing translations of "Tyrolese House-Mottoes."

The popular songs of Tuscany, of which Mr. J. A. Symonds translates some specimens with all possible fidelity and taste in the *Fortnightly Review*, are perhaps even more untranslatable than is usual with popular poetry, for besides the music of the language, most of which must be lost in English, there is something in the thought of most of them that seems to rebel against reproduction in the logical speech of a *Cultur Volk*, in which the sense seems to be broken by the abrupt transition from one image to another that contrasts with the frequent return upon the same image or the same phrase in poems seldom more than twelve lines long; though in the originals, sung slowly by those who feel the aptness of each image as they linger on the cadence, the connection is quite close enough for sentiment and even for literary elegance. With admirable candour, instead of the concluding paper of his own series on National Education (which is to be published immediately in a volume), Mr. Morley has given place to some corrections by Mr. J. G. Fitch of the most damaging

figures used to prove the complete failure of the present management of National Schools, joined with some judicious remarks on the negative character of the agitation carried on by the Education League and the political dissenters.

The Sept.-Oct. number of *Trübner's American and Oriental Literary Record* contains a strangely elaborate and objectless hoax. Under the guise of recording an interview with the well-known Norwegian poet, Bjørnsen, the author declares that being at Trondhjem, and "having nothing better to do," he walked out to visit the poet, who is feigned to be priest of a neighbouring parish mentioned by name, and that he found him in deep depression. The conversation is given at great length. Bjørnsen declares to the ingenious stranger that he is miserably poor, that he gets nothing by his books, that his income as parish priest is insufficient for his needs, and that he is on the point of emigrating and beginning life again in the United States. As a fact, Bjørnsen lives close to Christiania, 250 miles from Trondhjem, gets a large income from his works, lives in comparative luxury, and has never dreamed of entering the church. The only spark of truth in all this story is that Bjørnsen is really about to leave Norway; he has bought a house in Florence. What, we would ask, can be the object of such laborious romance?

Of the Norwegian poet Ibsen's new drama on the Emperor Julian, 4000 copies have been sold in a single week, though it is an unusually large and expensive volume.

Art and Archaeology.

History of Ancient Pottery, Egyptian, Assyrian, Greek, Etruscan, and Roman. By Samuel Birch, LL.D., F.S.A., &c. London: J. Murray.

It is now sixteen years since Dr. Birch published his erudite *History of Ancient Pottery*, simultaneously with Mr. Marryat's *History of Mediaeval Pottery and Porcelain*, the two forming a comprehensive history of the potter's art. Since the period of their publication, archaeological knowledge has so increased and facts have so accumulated that it has been found necessary to subject both works to complete revision. The new edition of Dr. Birch, though compressed into one volume, has been considerably increased in its matter, and indeed has been almost rewritten. It is therefore matter of regret that the author, in remodelling the Greek section of his subject, has given little more than a passing mention to such recent theories as those of Brunn and Conze. Brunn's theory has indeed been received with pretty general hostility; still the eminence of its author required that it should be fully stated.

Dr. Birch begins with a graphic sketch of the pottery of Egypt, Assyria, and Babylon, "the triple cradle of the human race"; he describes their sun-dried products, the infantine efforts of ceramic art. Thence he proceeds to the clay and straw bricks of the Egyptians, and their numerous works in porcelain, coated with a siliceous glass of celestial blue, "scarcely rivalled after thirty centuries of human experience." The wondrous products of Assyria and Babylon next follow, their glazed wares going back to remote antiquity, while their use of the tin enamel glaze anticipated by ages the re-discovery of its processes in Western Europe.

Clay was employed by the Assyrians and Babylonians for their public archives, their astronomical computations, their historic annals. The name of Nebuchadnezzar has been found stamped upon a Babylonian brick; the history of Tiglath Pileser and Esarhaddon, the wars of Sennacherib against the King of Judah, are among the events detailed upon their cylinders, and a detailed history of the Assyrian monarchy is now furnished by the happy employment of

this humble but indestructible material. "While the paper and parchment learning of the Byzantine and Alexandrian schools has almost disappeared after a few centuries, the granite pages of Egypt and the clay leaves of Assyria have escaped the ravages of time and the fury of barbarians."

The second part of Dr. Birch's work treats of Greek pottery. The author points out how extremely difficult it is to ascertain the age of the oldest Greek vases. "The first traces of Greek art and refinement appeared upon the coast of Asia Minor. The Greeks there placed in contact with the old and magnificent monarchies of Asia became imbued with the love of luxuries unknown to those of their race who inhabited the bleaker shores of the Peloponnesus. In the *Iliad*, which presents a glowing picture of early civilization, the decorative, as well as the useful arts of life are frequently described; and amongst them that of the potter is not the least prominent. Thus we find the dances of the vintage compared with the revolutions of the potter's wheel; and the large wine-jar or *pithos* is mentioned, which held the whole stock of wine belonging to a household, and which was in fact the cellar of the Homeric age," as it was subsequently the dwelling of the cynic philosopher.

The early vases are decorated with zones or bands enriched with animal forms in the most primitive style, distinguished by the extreme stiffness of their attitudes and their lengthened proportions; in the absence of human figures and in the style of the animals they present a great analogy with Oriental art, and enable us to class them as probably belonging to the heroic ages. But while Dr. Birch includes with these vases, as the product of one period, the other series in which only geometrical patterns occur; Conze maintains that the latter are a distinct class, and were the work of native Greek potters at a time previous to that intercourse with the East from which they derived the designs of animals disposed in parallel zones.

The next style preserves the archaic character: the animals are represented in rows facing each other, the ground strewn with flowers as in the robes of the Nimroud bas-reliefs, the subjects taken from Asiatic tapestries. Such vases also belong to the dawn of the art, derived from Oriental sources. Later, the human figure is introduced, to which period must be attributed the Dodwell Vase, representing a boar hunt, with figures and animals.

But most renowned among the archaic vases is the cup of Arcesilaos, king of Cyrene; he is represented seated, Dr. Birch says, in his palace, but the engraving looks more like a tent, presiding over the weighing of the drug silphium, which was one of the staple products of his country. Large scales are in front of the king, who is surrounded by attendants; one extends his arm to adjust the balance, another carries on his shoulder a bag of the precious substance, another watches the weighing of the merchandise, while a fourth raises a bag of the same, exhibiting it to the king. This singular picture of the manners of the age (circ. 458 B.C.) is in the National Library of Paris.

Greek art was conventional, and the slowness with which it emancipated itself from the thralldom of its origin is evident in the progress of painted vases. As long as these stiff hieratic forms prevailed, the black figures on the red clay were sufficient, but when it was required to express the soft contours which marked the more refined grace and freedom of the rapidly advancing schools of sculpture and painting, the colour of the figure was changed to red, and the general effect is improved, not only by the fineness of the clay, but also by the brilliancy of the black glaze of the ground. This is the highest development of Greek art. The principal outlines are rendered with wonderful spirit

and truth, and their great charm consists in the beauty of the composition, the perfect proportion of the figures, and the style of the draperies, which "bear great resemblance with the sculptures of the Parthenon, to those of the temple of Phigaleia, the balustrade of the temple of Victory, and other works acknowledged to be of the finest period of Greek art. All that is told of the style of painting of Polygnotus, Parrhasius, and Zeuxis may be traced in the designs of these vases."

Thus did the Greeks animate the coarse, porous earth with their elegant but sober decorations, perfect models of form, design, and composition, and though their productions are without the additional charm of colour possessed by other ceramic works, elevate the common material to the rank of the most esteemed masterpieces of the art.

We cannot follow Dr. Birch through the whole of his interesting history. He gives the various subjects of the vases derived from the Wars of the Giants, the *Iliad* and *Odyssey*, the exploits of Bacchus and Hercules, the Theseid, and endless sources, the different forms of the vases, the names of the artists, &c. The subject is inexhaustible as are the vases themselves. The British Museum alone contains 5,000; 3,000 were discovered in one year by the Princess of Canino, and the whole number that have been brought to light is estimated by De Witte at 50,000. Greek vases have been fully treated in the labours of Lenormant and De Witte, Inghirami and Stackelberg, Gerhard and other continental writers, but since the treatise of Sir William Hamilton, neither public patronage nor private enterprise in England has undertaken works equal to those published abroad, desirable as such publications are in a country where pottery is so considerable an object of production.

Let the Trustees of the British Museum then take the initiative, and publish a series of illustrations of their rich collection to accompany the two volumes of catalogue which have already appeared under the learned editorship of Dr. Birch and Mr. Newton. F. BURY PALLISER.

THE NEW MANTEGNA.

A GRANT of £1500 was made by Parliament at the close of the last session for the purchase of a picture by Mantegna for the nation. This picture, which was first exhibited on the 3rd instant in the National Gallery, is the so-called "Triumph of Scipio," executed by Mantegna in 1505 for Francesco Cornaro of Venice, and last in the possession of Captain Ralph Vivian in London.

Numerous opportunities have been given to the English public of seeing this production of the great Paduan master. It was exhibited in 1835 at the British Institution, in 1857 at Manchester, and in 1871 at the Royal Academy. On a long canvas, 8 ft. 10 in. by 2 ft. 4 in., we have a representation of a subject properly described by Mr. Wornum as "the reception of Cybele among the divinities of Rome." The bust of Cybele is carried on a litter by four men, preceded by a messenger, who presents it to the kneeling figure of a Roman lady (? Claudia Quinta), behind whom, to the right, Scipio Nasica and other members of his family stand in decent reverence. Three of the figures to the right are descending the steps of a palace, the last of them being a player with a pipe and drum. In the background behind the litter are two truncated pyramids surmounted by plinths, on the faces of which we read the following inscriptions:—

"P. SCYPIONIS
EX HISPANENSI
BELLO
RELIQVIÆ

and S. P. Q. R.
GN. SCYPPIO
NI CORNELI
VS FP (?)"

At the base of this picture :

"S HOSP. S NVMINIS I. (?D)AE C."

In a letter to the Marchioness Isabella Gonzaga, dated January 1, 1505, Pietro Bembo enters upon a long and passionate statement of the complaint of his friend Francesco Cornelio (Cornaro) at Venice, whom he describes as having given an advance of 25 ducats to Mantegna for a picture which he subsequently refused to part with because it was larger and more expensive than he had at first calculated. At Mantegna's death, this picture, described by Lodovico Mantegna as "Popera di Scipioni Cornelio," was found in the master's painting-room and seized for a debt by the Cardinal of Mantua. It was subsequently transferred, against the will of the painter's executors, to the Cornaro family, and till after 1815 adorned, as Moschini tells us, their palace in Venice. Having then been sold to the picture dealer Sanquirico, it was exported to England, where Mr. George Vivian bought it.

As an example of the later style of Mantegna the picture is no doubt of considerable interest, but it is not executed with the delicacy or tenderness which we still discern in some of the fragments of the "Triumph," and the drawing is as coarse comparatively as the touch is rough. The treatment betrays an aged hand and declining taste both as regards conception of movement and shape or making up of dresses. It is peculiarly disagreeable in the red and yellow tones of the ground; more so still in the parts which have been subjected to a (perhaps) necessary restoration, such as the bending figure of the Roman matron in the centre of the canvas, and the face of the soldier to the right holding a lance.

To sum up, there is just as much difference between this piece and those which Mantegna painted in his prime, as there is between the great masterpieces of Botticelli and those which he produced in his later days for the mere purpose of making money rapidly. J. A. CROWE.

THE THEATRE.—MADAME RISTORI.

FOR a few weeks at Drury Lane during the season, and now again for a month at the Opéra Comique, the English public have had the opportunity of seeing Madame Ristori in several of her most famous characters. Nor have they indeed been slow to take this opportunity; nor, so far as one can judge, has Madame Ristori failed to convince them not only that her powers are very great, but that they never were greater.

Madame Ristori is an actress apart from all others. Upon all those who have not seen Rachel (and upon many who have) her performances produce the impression of a new art. It is as if you showed the great interpretative etching of a master to persons who had hitherto been satisfied and delighted with the exact and mechanical reproductions of the craft of the photographer. The one may have more of realism: the other, of the undefinable qualities of genius and of style. And it is this other, of course, to which I venture to compare the art of Madame Ristori; for her art is not so much one of minute portraiture as one in which abstraction and selection, applied judiciously, count always for much. She indicates and suggests more than she actually portrays, and the world in which she moves as an artist is to some extent an ideal world, and in so far as it is that, the lives and feelings of its denizens are different from the lives and feelings with which we are familiar to-day, and which a great French artist—Mademoiselle Desclée—has mirrored for us in a dozen realistic impersonations. Not indeed that Madame Ristori is unnatural at all, for no one has her power of conveying to us, who most of us sorely need it, a sense of the *possibility* of high tragedy, of grand yet simple emotions in a world in which we were not born. But it is the grandeur and the exaltation that are new to us, and it is these perhaps which enable her to fulfil more perfectly than that wilder and stronger genius, Madame Rachel, the aim of tragedy—"to purify through terror and pity." Sometimes she is defiant and terrible: more often she is pathetic: but it is the nobility and beauty of her characters that throw oftenest into the shade all other qualities and all surroundings. And she has nothing of the feverish organization common to our time and to the French actresses—such as Rachel and Desclée—who most accurately and terribly reflect it.

The range of Madame Ristori's complete success is only a little less wide than that of her effort, and the last embraces the highest dramatic creations of nearly every land whose drama is recognized. She has endeavoured to embody, and for the most part has succeeded in realizing, one or other of the best conceptions of Greek, Englishman, German, and Frenchman; and though so much at home, is yet not more at home with the Greek beauty and terror of Medea than with the weird horror of Lady Macbeth, the slow sadness of Marie Stuart, or the loves, aspirations, and vengeance of that Lucretia Borgia whom Victor Hugo imagined and portrayed in a moment of even unwonted power. Of these performances, Marie Stuart has been thought by some to be the least satisfactory. The fault is probably that of Schiller, and not of Madame Ristori; for whatever it may seem to the patient German mind, to the English mind and the French this *Marie Stuart* does not appear to be an acting drama. Like any other piece, its poetical beauty evaporates in translation; and unlike most other pieces of equal fame, little is left when this evaporation has taken place. For there is scarcely any theatrical "situation," very little incident, and a long opportunity for the display of emotions less than commonly varied, and which only the art and feeling of Madame Ristori can save from proving a weariness. Besides, there are two acts in which the great actress is wholly absent from the stage. But here as elsewhere her conception is that of a mistress of her art, and her magnificent moments are not rare. Of these let us recall one: it is the time when Marie, humbled in circumstance but not in heart, essays to kneel before the English Queen. The action not only wounds her pride: it is against all her traditions: and more, it is hateful to her personal feeling. At first she will submit: she will conquer herself; but no—it is a yoke to which she cannot stoop. And Madame Ristori rises and turns, with a gesture of misery; for repugnance has conquered will.

Perhaps it is hardly fair to speak of the little bit of *Macbeth* which has been seen this autumn. These isolated scenes—it was here the Sleep-walking scene—can never do justice to artist or spectators. But the thing was done in English, was for that reason interesting as giving possibly a wider hope for another day, and was received with quite unbounded enthusiasm by an audience which must have numbered many fine judges. To my own thinking, it did not quite realize the promise of its commencement. The English, wonderfully free and correct at the beginning, became less distinct towards the end; and the most striking effect was produced at first, when Lady Macbeth enters "in a most fast sleep":—

"You see her eyes are open."

"Ay; but their sense is shut."

And this, Ristori absolutely realises.

Victor Hugo touched a subject-thoroughly congenial to him when he wrote for the French theatre upon the story of Lucretia Borgia a play which would be intensely sensational if it were not also most literary and artistic. That is a happy time for the great French genius of adventure and experiment, when no life is sure for a single day, "what with war, pestilence, love, intrigue, murder, poison, and the Borgias." The wild uncertainty of life which fascinates him so strongly is found among all classes in Ferrara when Lucretia is supreme, and there are memories of the violence of Caesar done upon John. Writing in the tranquillity of Guernsey during the prosperity of the Empire, he had, in his stories of our time, to seek his favourite themes and circumstances chiefly in the lives of social outcasts; and so we had *Les Misérables*. But in the drama of *Lucretia Borgia*, M. Hugo did not confine himself to the horrors. He endowed his Duchess with fine aspirations, making her repent with tears, and again become incarnate cruelty. There is endless variety, and that is why no single part can be better suited to show the range of Madame Ristori's art. Of its different manifestations, that of vindictiveness is, I think, the least powerful. Great is the genuine tenderness, most artful the cajolery, most intense the dread of discovery and the terror at death for her son, and then, at her son's hand, for herself. The most notable scene—perfect as a whole and perfect also in its parts—is that in which she supplicates her lord to spare Gennaro, who has insulted her name, but whom her husband thinks to be her lover, and whom *she* knows to be her son. And the subtlest and finest moments in this scene are possibly those in which the Duchess, struck suddenly by her husband's

charges, accompanied by the most terrible threats, which he has the power to enforce, is first amazed, helpless and stunned, and then collects her thought with such an energy as could be shown only by a woman of great intelligence at the call of a great passion. That struggle first for thought and then for expression, to suggest that if the youth is her insulter he cannot be her lover too,—that portrayal of a crisis when all but the strong would have abandoned effort, and the strongest can but make it with a mind now fully master of its intentions, but hardly, indeed, of its means,—nothing that I have seen in English and French theatres for say a dozen years, quite equals this moment of Ristori's in quiet intensity and truth.

FREDERICK WEDMORE.

NOTES ON ART.

By an unfortunate oversight, a note was inserted in p. 407 of our last number respecting the bas-reliefs found at Salonica, in which the popular interpretation of them is reiterated, which we had been at the pains to combat in p. 387 of the previous number. We adhere, of course, to the views expressed in the longer note on p. 387, which are our own, and not to those expressed in the short note on p. 407, which are those of the *Levant Herald* and the *Pall Mall Gazette*.

The sculptures of the so-called Nereid monument from Xanthos now in the British Museum have always since their discovery by Fellows in 1846 been regarded as very important examples of Greek work, but never adequately published, and hence never fully discussed in relation to other remains of Greek art. To remedy this Prof. Michaelis, of Strassburg, has just had a new set of drawings made from them, which he will publish with a commentary in the *Monumenti and Annali* of the Archaeological Institute of Rome, and afterwards possibly as a complete work in an enlarged form. The history of Lycian art generally is still obscure enough, especially in the matter of its affinity to Athenian sculpture. It has been usual to speak of the sculptures of the Nereid monument as executed in the spirit of the second Attic school, and even to point out certain details in the treatment of the draperies in the statues of the so-called Nereids which occur in the sculptures of the Parthenon and appear to have been peculiar to Athenian work of the best time. The frieze is executed with comparative carelessness, probably the result of employing local artists to carry out the design. But we must wait for a fuller examination of these matters. Meantime it may be mentioned, as an illustration of the misfortunes which have beset the Lycian sculptures in the way of becoming known beyond the British Museum, that part of them were published last year with a doubtless learned commentary in the Russian language.

The history of Greek art on which Prof. Brunn, of Munich, the well-known author of the *Geschichte der griechischen Künstler*, has been engaged for rather more than two years has advanced to the time of Pheidias, though the difficulties of the period immediately before that are not yet quite overcome. One of these difficulties is raised by the style of the existing fragments from the metopes of the temple of Zeus at Olympia, the sculptures of which were executed under the direction of Pheidias. The sculptures of the front gable or pediment were from the hand of Paconios, a native of Mende in Thrace, and it is proposed to account for the harmony of style which doubtless existed between his work and that of Pheidias by assuming the latter to have been influenced in the formation of his style by the school of sculpture in Northern Greece whence came Polygnotos, who was a sculptor as well as a painter, and at the same time the first instructor of Pheidias.

The metope and triglyph of a temple, a plaster cast of which was referred to in the last number of the *Academy* as having arrived in the British Museum, was discovered by Dr. Schliemann in the autumn of last year, in the course of his excavations on the site of Novum Ilium. On the metope is sculptured in relief the quadriga of Helios, the face of the god bearing a strong resemblance to the type which occurs on a coin of Alexander I., king of Epirus, B.C. 342-326. In both the crown of rays characteristic of Helios is also rendered in the same way, as opposed to its usual form on other coins. As

regards the style of sculpture in the horses as well as in the figure of the god, there would probably be little question about assigning it to the Macedonian period, were it not that this peculiarity in the channels of the triglyph, that they stop short some distance from the bottom, has not yet been found in architecture previous to the Roman period.

The current number of the *Gazette des Beaux-Arts* contains the following articles: 1. A short paper, by Ernest Renan, entitled "Les Dircés Chrétiennes," elucidative of a passage in the first epistle of Clemens Romanus, in which he speaks of "the Danaïdes and the Dirces having endured terrible and impious monstrosities for the sake of their faith." M. Hefele, Bishop of Rothenburg, first surmised that these names were not those of the Christian martyrs themselves, but of the *robles* that the pious women of the early Christian Church were forced to play in the Roman Amphitheatre. M. Renan brings forward in support of this opinion a fresco at Pompeii in which the fate of Dirce, who was dragged to death by a wild bull, is represented as a spectacle. This representation, M. Renan considers, was probably painted from an actual scene in a theatre, in which possibly a Christian was the victim. That the Romans found amusement in this fearful reality of their acted tragedies is too well attested a fact to allow of doubt.—2. A third notice of the Wilson Collection, in which the later Flemish and the English pictures are criticised. The *Gazette* has certainly made good use of the Wilson catalogue. Every number lately has contained two or three etchings from it; but the plates are getting terribly worn. In the present number the fine portrait of Jasper Schade van Westrum, etched by Ch. Waltner after Frans Hals, has lost all its delicacy; and the Widow and Child, etched by J. Jacquemart after Sir Joshua Reynolds, is greatly blurred.—3. An interesting history and description of "Some Satirical Prints for and against the Reformation," by Champfleury, to be continued.—4. A continuation of René Menard's notice of the Vienna Exhibition, criticising the French pictures and sculpture.—5. "The Japanese Bronzes exhibited in the Palais de l'Industrie," with many curious illustrations of these remarkable works of oriental art.—6. "The Rohan Service," a Sèvres service which was acquired by Lord Dudley in 1870 at the San Donato sale. A saucetureen of silver, richly ornamented, belonging to the Rohan Plate, is engraved.—7. "The Iconography of Alcibiades, Statues, Busts, and Portraits," by Henry Houssaye. A fine etching of a Wolf by G. Greux, after Peter Potter, is the chief pictorial feature of the number.

A loan exhibition of the works of old masters has been organised in Brussels by the "Société Néerlandaise de Bienfaisance." The chief feature of this exhibition is the number of works from the celebrated Suermondt collection, which has contributed no less than 120 paintings and 44 drawings. Among these we find as many as three Van Eycks, one of which, known as "L'homme à œuillet," was engraved a short time since in the *Gazette des Beaux-Arts*. It is one of Van Eyck's most admirable portraits. The recently discovered master, Gerard David, has a picture ascribed to him, and there are several others of the early Flemish school in this collection. The old German school is likewise represented by some of its chief masters, but as might be expected, the wealth of the exhibition lies in works of the later Netherlandish schools. Rembrandt, Frans Hals, Paul Potter (by whom we have the famous landscape of the Suermondt collection, "Bois de la Haye"), Albert Cuyp, Jan Steen, and many more of the later Dutch masters, may be studied to advantage in this small but rich exhibition. Truly the art tourist has had a great advantage this summer in being able to view without difficulty or favour in so many of these loan exhibitions the treasures that usually lie hidden or inaccessible in the depths of private houses.

The excellent series of portrait sketches by Maclise which appeared in *Frazer's Magazine* from 1830 to 1838 have been collected and published with the original notices, which were chiefly from the pen of the well-known Dr. Maginn. There are nearly 230 portraits, and among them we find many of still living celebrities—of Earl Russell, Carlyle, and Buckstone, for example. They illustrate a brilliant intellectual epoch in the history of England, and are particularly valuable as having

appeared just before the age of photography, for Daguerre's process was not published until 1839. The *Daily News* in describing the collection remarks that "poor Maginn's notices, once considered so brilliant and witty, are chiefly valuable at the present day as illustrating the better taste which now prevails among writers and readers. However much he disliked his politics, no journalist would now wish or dare to allude, twenty years after his death, to a man as great as Sheridan as 'the red-snouted author of the *School for Scandal*,' and Maginn's praise was often so fulsome as to be almost more objectionable than his abuse."

One of the last acts of King Amadeus of Spain was to found a National Chalcographic Institute for the promotion of the art of copper-plate engraving in Spain. It was proposed that the old plates belonging to the State should be reprinted, that all the most celebrated pictures of Spanish masters should be engraved by the best artists, and that a collection should be made of the portraits of distinguished Spaniards. The scheme, owing to the disturbances that have since taken place, has not been very thoroughly carried out, but several plates have been issued which are to be had at a low price. For instance the celebrated "Las Meninas" by Velasquez costs only 6 fr., and "The Virgin appearing to St. Ildefonso" by Murillo 10 fr.

Peter Janssen, of the Düsseldorf school, has recently finished some large wall-paintings in the Rathhaus at Crefeld. These paintings have for their subject the victories of the Germans over the Romans.

A series of articles on "The Galleries of Rome," translated from the Russian of Ivan Lermoloff, commences in the October number of the *Zeitschrift für bildende Kunst*. The writer begins with the Borghese Gallery, and gives us a learned dissertation on a few of the paintings of the early Italian schools, especially pointing out the difference in the painting of hands and ears of some of the masters of the fifteenth century. Other articles in the number are—"Johan Josefson van Goyen," by Dr. C. Vosmaer; "The Vienna Exhibition," by Jacob Falke; and "The Loan Exhibition of the Paintings of Old Masters at Vienna," by Dr. O. Eisenmann. The illustrations are especially numerous and good.

A monument to the German philosopher Ludwig Feuerbach has recently been set up in the old churchyard of St. John, where Dürer and many other distinguished Germans of past times lie buried.

An industrial institution formed on the plan of the "Conservatoire des Arts et Métiers" at Paris, and the "Musée de l'Industrie" at Brussels, has been founded at Vienna as a lasting memorial of the World Exhibition. It is intended to promote the artistic education of workmen and artisans, and has already a large library.

The Berlin correspondent of the *Daily News* describes the interesting collection of books and pictures illustrative of the late war which has recently been exhibited for charitable purposes in that city. The printed matter is very complete, consisting not only of the larger and graver works, but also of all the journals of Europe and America to the end of the second siege, including the tiny sheets which poured out in such numbers during the existence of the Commune. The collection of caricatures, nine-tenths of them French, is said to be quite complete. The pictures are chiefly photographs, but there is a large set of coloured lithographs, and a few etchings. The lithographs have enjoyed a wide popularity in Germany.

New Publications.

ARCHIBALD CONSTABLE and his Literary Correspondents. A Memorial; by his Son, Thomas Constable. Edinburgh: Edmonston and Douglas.

COLLINS, J. Churton. Sir Joshua Reynolds as a Portrait-painter: an Essay. Illustrated by a series of portraits of distinguished Beauties of the Court of George III. Macmillan.

- COMPLETE WORKS OF MONTAIGNE; comprising the whole of the Essays, Letters, and Travels. Now first translated. With Life, Critical Essays, and Notes. Templeman.
- FOERSTER, E. Denkmale italienischer Malerei vom Verfall der Antike bis zum 16. Jahrh. 57-60 Lfg. Leipzig: Weigel.
- GAEDECHENS, R. Unedirte antike Bildwerke. Beschrieben und erklärt. I. Hft. Jena: Deistung.
- HEATON, Mrs. C. W. Leonardo da Vinci and his Works; consisting of a Life of Leonardo da Vinci; an Essay on his Scientific and Literary Works, by C. C. Black, M.A.; and an account of his more important Paintings and Drawings. Macmillan.
- KREYSSIG, F. Vorlesungen über Shakespeare, seine Zeit, und seine Werke. (Zweite verbesserte und vermehrte Auflage.) Erster Band. Berlin: Nicolai.
- LE TOMBEAU de Théophile Gautier. Paris: Lemerre.
- LIGER, F. La Ferronnerie ancienne et moderne, ou Monographie du fer et de la serrurerie. Tome i. Paris: Sandoz et Fischbacher.
- MAURICE, F. D. The Friendship of Books; and other Lectures. Macmillan.
- PETERSEN, E. Die Kunst des Pheidias am Parthenon und zu Olympia. Berlin: Weidmann.
- RIEDENHAUER, A. Studien zur Geschichte d. antiken Handwerks. I. Bd. Handwerk und Handwerker in den homerischen Zeiten. Erlangen: Deichert.
- ROSENBERG, A. Die Erinyen. Ein Beitrag zur Religion und Kunst der Griechen. Berlin: Bornträger.
- SACKEN, E. v. Die antiken Sculpturen d. k. k. Münz- u. Antiken-Cabinetes zu Wien. Wien: Braumüller.
- SAGAS from the Far East; or, Kalmouk and Mongolian Traditionary Tales. With Historical Preface and Explanatory Notes. By the author of *Patrañas*. Griffith and Farran.
- SMITH, T. J. Eighteen Etchings of Rural Scenery. Tegg.
- STEWART, D. J. On the Architectural History of Ely Cathedral. Van Voorst.
- THE POETICAL REMAINS of King James I. of Scotland. With a Memoir and an Introduction to the Poetry. By the Rev. C. Rogers, LL.D. Edinburgh: the Author.
- VAN DER LINDE, A. Das Schachspiel des xv. Jahrh. Berlin: Springer.
- WESSELY, J. E. Adolph Menzel. Sein Leben und seine Werke. Leipzig: Danz.

Physical Science.

Reprint of *Papers on Electrostatics and Magnetism*, by Sir William Thomson. Macmillan. 1872.

It is no slight credit to British science that it claims two out of the half dozen mathematicians of the highest order who have developed the general theory of the distribution of statical electricity, since it left the hands of Poisson. The Essay of the first of these writers, Green, in consequence of its having been published by subscription at Nottingham, obtained no immediate notice even in England. No allusion to its results is to be found in treatises on the same subject in the next following years, for example in Whewell's article in the *Encyclopædia Metropolitana* or in Murphy's work. The great importance of Green's Essay seems to have been first recognized by Sir W. Thomson, who brought it into general notice, both in England and on the Continent, by causing it to be reprinted in Crelle's Journal. Indeed Thomson had independently discovered some of Green's results before he had obtained a sight of the Essay. All the scattered memoirs of the first great mathematician and those of the second on electrostatics and magnetism have now been reprinted in single volumes and thus rendered more accessible. The reprint with the above title contains Thomson's articles on electrostatics and mathematically allied subjects which originally appeared in the *Cambridge Mathematical Journal*, the *Cambridge and Dublin Mathematical Journal*, Liouville's *Journal de Mathématiques*, the *Philosophical Magazine*, Nichols' *Cyclopædia*, the *Reports of the British Association*, the *Transactions or Proceedings of the Royal Societies of London and Edinburgh*, the *Royal Institution of Great Britain*, the *Philosophical Societies of Manchester and Glasgow*, and the *Comptes Rendus* of the French Academy.

It includes also Liouville's note appended to Thomson's memoir on electrical images. It is difficult to convey to those who have not studied Thomson's writings any adequate conception of their great and varied excellence. The memoirs of mathematicians on nominally physical subjects have frequently little or no connexion with actual nature and are not confirmed by any verified results. On the other hand many an experimentalist, from want of mathematical training, neglects circumstances which largely influence his inquiry, and either arrives at no definite conclusion, or at such as can be only approximately true under special circumstances. With no class of physicists has this latter defect been more common than with electricians. A large number of articles on electrometry are from this cause valueless. Even where some sort of mathematical reasoning is employed, as for example in Lord Mahon's work, these experimenters are unconscious that their problems required a far more elaborate analysis. In Professor Thomson's writings we find, however, the combination of the highest mathematical talent with ingenuity in devising new instruments of research and precision in their use. Others have been content with measures expressed in the arbitrary scales of their instruments, but Thomson is one of the very few who obtain absolute measures involving only the primary units of time, length, and mass.

A large part of his collected memoirs consists of mathematical results which cannot be referred to without a free use of mathematical symbols. All that can perhaps be attempted in the limited space of a review is to notice some of the simpler formulæ which would first engage the attention of a student. An elementary subject which is here much simplified is that of finding the attraction of a spherical shell on an external point. The expressions for the differential elements of a surface here used may be also applied to calculate the potentials of spherical shells either for an internal or an external point. They also supply a proof, clearer perhaps to a beginner than that in the *Principia*, of the theorem which forms the foundation of electrostatics, namely that a spherical shell exerts no attraction on an internal point if the law of force be that of the inverse square of the distance. These differentials are also important in this subject from the fact of Gauss having employed them to prove a formula subsidiary to his proof of the important theorem, that if the potential have a constant value over a closed surface, it will also have the same constant value throughout its interior. A student of the present day must not think of entering upon the study of the laws of electricity without previous acquaintance with the doctrine of potentials. Most of the laws of the distribution and motion of electricity cannot be expressed in other terms. The simplicity of the formulæ which Thomson has obtained, for the mutual force and for the quantities of electricity upon two influencing spheres charged to given potentials, suggests the thought that there may exist comparatively simple formulæ for the densities in terms of the potentials. At all events, if it be considered how difficult is the practical use of the proof plane, and how elaborate are Poisson's expressions for the density in the case in question, it would seem preferable to regard the force and the quantities as subjects for experimental verification rather than the element which Coulomb measured. To show how this might be done would, however, require far more space than can be here allowed.

The reviewer must in conclusion enforce the necessity of the study of this and the promised reprints of Sir W. Thomson's memoirs upon all who wish to be acquainted with the present state of electrical science.

It is a subject which recommends itself to those interested in mathematical physics from the circumstance that the

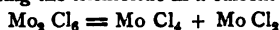
various theorems of Green, Thomson, Gauss, Kirchhoff, and others are in harmony with each other and form a consistent body of doctrine.

JOHN A. DALE.

Notes on Scientific Work.

Chemistry.

The Chlorides of Molybdenum.—An interesting paper on these compounds, by L. P. Liechti and B. Kempe, is printed in the *Annalen der Chemie*, Band clxix, Heft 3, just published. In some respects their results differ from those of Blomstrand. They are still engaged in the investigation of the oxychlorides of this metal, of which they have found at least four. Of the chlorides the pentachloride, the MoCl_5 of Berzelius and Blomstrand, is produced by the action of chlorine on the pure metal when air is absolutely excluded. Brownish red vapours are the result of the action, and these condense to form black crystals. It readily melts and, provided air has no access to it, does not exhibit the green colour which Debray noticed. When heated in the air it is converted into the oxychloride MoO_2Cl_2 . The trichloride is formed from the pentachloride when it is heated in a stream of dry hydrogen; the tetrachloride by heating the trichloride in a current of carbonic acid:



The tetrachloride is as readily changed in contact with air as the pentachloride. The dichloride is a dull yellow powder, which undergoes no change in air. From a solution in hydrochloric acid it separates as a hydrate in brilliant yellow needles. The existence of a hexachloride is very doubtful.

The Atomic Weight of Molybdenum.—A paper by L. Meyer on this subject appears in the same number of the *Annalen*. By four totally different lines of investigation he has been led to a number ranging between 95.6 and 95.8 for the atomic weight of this metal, a number very nearly six times that of oxygen, as determined by Stas. His conclusions accord with Dumas and prove the number 92, in use before his research, to be erroneous. He traces the following relations between the atomic weights of the three groups of metals given below:

Vanadium 51.2	Chromium 52.4	Copper 63.3
Difference = 43.0	Difference = 43.2	Difference = 44.4
Niobium 94.0	Molybdenum 95.6	Silver 107.7
Difference = 88.0	Difference = 88.4	Difference = 88.5
Tantalum 182.0	Tungsten 184.0	Gold 196.2

The atomic weight of molybdenum was not correctly determined so long as it was only calculated from experiments on the reduction of molybdic acid.

The Volumetric Method of Determining Ammonia.—Rüdorff in a short paper in *Pogg. Ann.*, 1873, No. 7, 379, directs attention to the difficulties often attending the carrying out of this process through the irregular manner in which the alkaline solution boils, especially when it happens to contain in addition a substance which forms a precipitate with potash. In such cases he modifies the process by passing a current of steam into the solution, and in this way easily succeeds in removing the ammonia. 1.194 grammes of the crystallized double salt of the double chloride of copper and ammonium yielded ammonia corresponding to 1.192 gramme of the salt.

The Freezing of Alcoholic Liquids.—Melsens has made some experiments (*Naturforscher*, 1873, No. 39, 368) on the effect of low temperatures on brandy and wine, and his results accord completely with those of Horrath, who noticed an unexpectedly slight degree of sensation of cold in alcohol which had been exposed to a low temperature. Melsens finds that when brandy is cooled to 20° and even 30° or 35° below zero, it can be swallowed without any discomfort, provided only it be taken from wooden vessels. At 30° it is viscid and opalescent, and contains about 50 per cent. of alcohol. At -40° or -50° the strong alcoholic liquid becomes a solid, and if placed in the mouth in this state the pasty mass as it melts on the tongue appears less cold than ordinary ice. It has to be cooled to -60° to produce any impression of cold, and then is but rarely accounted very cold. The coldest portion prepared by Melsens had a temperature of -71°, and this produced in the mouth a sensation resembling that experienced on taking a spoonful of hot soup. He also describes the effect of great cold on effervescing wines.

The Electric Discharge in Air.—By allowing a series of sparks from an electro-magnetic induction apparatus to be discharged between platinum electrodes in perfectly dry air Böttger (*Chem. Centralblatt*, 1873, No. 32) noticed the formation of yellow vapours after the lapse of a few minutes; nitrous acid was recognised by the smell. If the sparks be passed through very moist atmospheric air, if the sides of the glass vessel in which the experiment is conducted be moistened with distilled water and some be allowed to collect at the bottom, no yellow vapours are formed, but the air in a few minutes acquires the characteristic odour of ozone, while in the water the presence of hyponitric acid can

be detected. Iodide of potassium and starch paper, the test in common use for the detection of ozone in air, is seen then to be an untrustworthy reagent, as it must in many cases be turned blue by nitrous acid. It behoves meteorologists then, now that their attention has again been directed to these facts by Prof. Böttger, to ascertain the exact conditions of moisture under which the acid is produced, and to establish a process for the estimation of ozone which shall be of absolute certainty.

Botany.

Composition of Fungi.—The Russian Agricultural Commission for the Vienna Exhibition has published some analyses of edible fungi made under the superintendence of Prof. Nicolas Socoloff. They may be compared with that given by Prof. Church for *Lycoperdon giganteum*, which is also edible when young (see the *Academy*, 15th September, 1873, 353). The following are the results for three species of *Boletus*:—

	<i>B. edulis</i>	<i>B. edulis</i>	<i>B. annulatus</i>	<i>B. scaber</i>
Water	11.52	11.50	12.34	13.49
Ash	7.36	6.52	7.56	7.90

The composition of the ash was:

	<i>B. edulis</i>	<i>B. edulis</i>	<i>B. annulatus</i>	<i>B. aurantiacus</i>
Phosphoric acid	25.06	26.08	21.74	20.27
Sulphuric acid	12.97	8.42	—	—
Iron sesquioxide	1.63	.98	.53	1.11
Manganese proto-sesquioxide	2.22	2.41	—	—
Lime	1.00	5.95	—	—
Soda	3.60	.87	3.99	1.65
Potash	50.37	57.76	58.10	56.09
Sodium chloride	3.11	3.55	—	—

The proportion of nitrogen varied in dried specimens from 6.63 to 7.56 per cent.; the average percentage of phosphoric acid was 1.7 per cent.

Phyllotaxis.—Dr. Airy in a paper read before the Royal Society describes a mechanical contrivance by which the terms of the common phyllotactic series can be shown to be derivable from one another by a process of condensation. Moreover he arrives at the conclusion "that the necessary sequence of these successive steps of condensation, thus determined by the geometry of the case, does necessarily exclude the non-existent orders one-fourth, three-sevenths, four-elevenths, &c." This conclusion Prof. Beal has shown (*American Naturalist*, August, 1873) to be "an incorrect theory," inasmuch as he finds the phyllotaxis of many cones of the Norway spruce to be eleven-twenty-ninths, which is a term of Dr. Airy's impossible series.

Hydnora Americana.—The genus *Hydnora* includes a number of extremely remarkable root parasites; they are with one exception found only in Africa. Two species occur at the Cape; a variety of one of these was met with by Welwitsch in Angola, and a second Angolan species has been recently described by Decaisne (*Bull. de la Soc. Bot. de Fr.*, 28th March, 1873). Beccari found two species in Abyssinia (*Nouv. Giorn. Bot. It.*, 1871, 5), while a third from the same locality is described by Schimper. Sabatier also found a species, which Decaisne holds to be distinct, at the sources of the White Nile. In the African type the staminal column is annular and the placentas are pendulous. In the solitary American species, first discovered in Southern Brazil by Tweedie, the staminal column is solid, and the ovules are immersed in radiating plates which form parietal placentas. These terminate above in a truncate mass forming the stigma and constituting the floor of the perianthial tube. The fertilisation of this extraordinary plant is effected by small beetles, which crawl through three apertures beneath the staminal column, attracted probably by some secretion from the small glandular bodies which stand immediately below them. Robert Brown failing to find pendulous placentas, and not appreciating the complete significance of the radiating plates, described Tweedie's specimen as dioecious, in which he was in error. But a more curious misapprehension of the structure of the plant was fallen into by Mr. Miers, who in the September number of the *Journal of Botany* gives a description of the upper half of a flower collected by himself in 1826 near Buenos Ayres. He regards the glandular bodies above mentioned as the placentas, which in his specimen were really altogether wanting. De Bary has published an account in the main correct of this extraordinary species in the *Abhand. der Naturf. Gesellsch. zu Halle*, 1868, and at the first meeting of the Linnean Society on the 6th instant Dr. Hooker gave the results of an examination of the specimen in the Kew Herbarium which had originally been in the hands of Robert Brown.

New American Cytinus.—In the *Botanische Zeitung* for 1872, p. 709, tab. 8, Eichler described a new genus of *Balanophoraceae* under the name of *Bdallophytum*, including two species both American and both known only as male plants. One of these, *B. Andrieuxii*, is undoubtedly identical with the *Cytinus americanus* of R. Brown. The other is also a *Cytinus*. Eichler in a short note appended to the last and concluding part of De Candolle's *Prodromus* admits the affinity of these plants with *Cytineae* and probably with *Cytinus*, and promises the publication of some further details respecting them.

Bacteria.—In the *Quarterly Journal of Microscopical Science* for October, Prof. Lister describes some observations which he believes prove the origin of Bacteria from fungi. A fungus made its appearance

in some milk with which he was experimenting; it consisted of delicate branching filaments bearing conidia characterised by a raw sienna tint. Besides the ordinary process of germination and a toruloid pullulation, the conidia were often seen to give off exquisitely delicate threads. Among the filaments free bodies, exactly resembling in form, size, and refractive power portions of these delicate sprouts, were observed. Some of them were seen to be branched, and though in this respect they deviated from the most typical form of bacteria, their bacteric nature was placed beyond doubt by characteristic movement observed on several occasions.—In the same Journal Mr. Lankester describes a peach-coloured bacterium which made its appearance in water containing decomposed animal organisms. The characteristic pigment enabled him to correlate a number of entirely different forms as belonging to the same physiological species which have been held hitherto by Cohn and others to be distinct.

The sixth volume of Bentham's *Flora Australiensis* includes the orders from *Thymelæe* to *Dioscorideæ*. *Thymelæe* include the endemic Australasian order *Pimeleæ*, with 67 species. *Nepenthes*, a characteristic type of the Indian Archipelago, is represented by one species in Queensland. *Euphorbiaceæ* is represented by 37 genera, 14 of which are endemic. Bentham separates *Calycocephalus* from *Euphorbia*, though on different grounds to Baillon, who considers the flower heads as heads of flowers in the former and as single flowers in the latter. *Casuarina* has 19 species, of which all but *C. equisetifolia* are endemic. There is one species of *Balanophora* in Queensland found also in the New Hebrides. Of *Coniferae* the 11 Australian genera are all limited to the southern hemisphere except *Podocarpus*. If one may call attention to a not very important error, *Athrotaxis* is a common but unauthorized name for the genus called by its founder, Don, *Athrotaxis*. The Australian *Orchidideæ* contain 48 genera, which geographically may be divided into two groups. Twenty-eight genera, comprising one-third of the total number of species, including the whole of the tribes *Malaxideæ*, *Vandeæ*, *Bletideæ*, *Arethuseæ*, the first group of *Neottideæ*, and the *Ophrydeæ*, belong to the tropical Asiatic Flora, represented in Australia by endemic or frequently by identical species; none of these are found in W. Australia. The remaining 20 genera, comprising two-thirds of the species, are essentially Australian, belonging to three Australian groups of *Neottideæ*.

Passage of Gases through Vegetable Colloidal Membranes.—A. Barthélemy has experimented (*Compt. Rend.* lxxvii, 427) upon the dialysis of carbon dioxide, nitrogen, and oxygen through the thin elastic faded leaves of certain species of *Begonia*. He finds that the natural colloidal surfaces of plants permit the transpiration of carbon dioxide at a rate thirteen to fifteen times more rapid than that observed when nitrogen is used and six to seven times more rapid than in the case of oxygen. When the gases are dry the disproportion in the rates of passage is reduced. The results were very different from those obtained by Graham with caoutchouc membranes.

Sensitiveness in the Leaves of *Drosera*.—At the recent meeting of the British Association at Bradford a paper was read by Mr. A. W. Bennett On the Movements of the Glands of *Drosera*. The glands which cover the margin and upper surface of the leaves of the sundew have the power of imprisoning insects that alight upon them by means of a thick viscid secretion which they exude. After the insect has become completely entangled in this secretion, the glands from all parts of the leaf begin to converge towards it, every gland ultimately pointing the knob at its extremity towards the imprisoned insect, which they apparently consume and digest. It appears from a series of experiments made by Mr. Bennett that raw meat is acted upon by the glands of the leaf in precisely the same manner as a fly, though rather more slowly; while a non-nitrogenous organic substance like a piece of wood, or an inorganic substance, undergoes no change. From the time which elapses after the first contact of the insect before any considerable movement of the glands takes place, it seems that it is not due to the mechanical irritation caused by the struggles of the insect.

Dimorphism in Flowers.—Dr. Hermann Müller, of Lippstadt, is publishing a series of articles in *Nature* in which he offers a somewhat new interpretation of the different form and colour sometimes exhibited by the flowers belonging to different individuals of the same species. He illustrates this especially in the case of three plants: *Lysimachia vulgaris*, *Euphrasia officinalis*, and *Viola tricolor*, in each of which there are two well-known forms, one with larger and brighter, the other with smaller and less conspicuously coloured flowers. Dr. Müller shows that these are accompanied by other structural differences, relating especially to the position and arrangement of the stamens and pistil, which clearly point to contrivances for different modes of fertilisation; and this again corresponds to differences in the localities where the two forms occur spontaneously. In the case of *Lysimachia vulgaris* the form with the larger and brighter flowers grows in open, sunny situations, and is abundantly visited by insects, while the form with the smaller, less brightly coloured flowers is found in more shady situations, where there are very few insects, and is apparently generally self-fertilised. These differences in the size and form of the flower have frequently occasioned the

division of a species into well-marked varieties; and even, as in the case of *Rhinanthus*, into two distinct species *R. Crista-galli* and *R. major*.

Geology.

A New Fossil Ape.—M. Delfortrie describes (*Actes de la Société Linnéenne de Bordeaux*, 1873, vol. 29, part i.) the osteological characters of the cranium of a new species of fossil ape belonging to the family of the Lemurs, found by M. Bétille in the phosphate beds of Sainte-Néoule de Bédier, Lot, France. The skull, which is entire, is of an elongated conical form, and represents an adult individual. The occipital crest is slightly projecting, but wide in consequence of the development of the mastoids. The parietals are very spreading, constituting nearly the whole of the cerebral arch. The temporals are flat, elongated, and exceed in height the half of that of the orbits. The frontal depressed, bearing a keel upon the median line. The orbital circle is closed, of nearly oblique oval form, strongly inclined towards the nose. The nasal bones are very elongated, slightly raised on the median line, and inclined on their exterior edge towards the junction with the maxillaries. The cranial characters are remarkably similar to those of the *Lori grise*, but the dental system shows it to belong to an entirely new genus of the *Makis* family. With the exception of the principal and the two right hind-molars, all the teeth were broken off by the workman's pick, but the roots of all of them, with the exception of the incisors, are adherent to the alveolae, which are still intact, so that on allowing the normal number for the incisors, the series is found to be as follows: incisors two, canine one, premolars four, principal molar one, hind-molars two. An insectivorous character is displayed in the sharp denticulation of the preserved teeth. To this fossil M. Delfortrie assigns the name of *Palaeolemur Bétilli*. While his paper was in the press M. Delfortrie received from the above locality a right mandible belonging to an individual of the same species. He has since forwarded both specimens to M. Albert Gaudry, who recognises in them many affinities with the Eocene or Miocene pachyderms, and traces a specific identity between the new fossil and *Aphotherium Duvernoyi*, Gervais, and *Adapis parisiensis*, Cuvier, both from the Paris gypsum; as well as with the *Adapis* from Barthélemy, near Apt.

New Observations on the Dinocerata.—By obtaining many additional remains of the order Dinocerata from the collection of the Yale College Expedition, Prof. O. C. Marsh has been enabled to clear up some doubtful points regarding their structure. The dental formula, so far as it is now known, is as follows: incisors 3; canines 1; molar: $\times 2$; = 34. The premaxillaries are not united in front. The lower jaw presents no proboscidean features, but resembles that of the *Hippopotamus*, more especially in the downward extension of the rami below the diastema. It is extremely probable that both sexes were provided with horns. It is possible that some only of the osseous protuberances of the skull supported true horns. The manus had five toes with moderately elongated metacarpals. There were four toes in the pes with short metatarsals. The characters of this order include marked perissodactyl, artiodactyl, and proboscidean features, the last of which is the least developed. The geological horizon of all the animals of this group is Upper Eocene. A new species of *Dinoceras*, named by Marsh *D. laticeps*, is represented by a nearly perfect skull with entire lower jaw, and various other parts of the skeleton. It differs from *D. mirabilis* in the greater proportionate width of the skull, the shorter and more massive posterior horn-cores, and the more compressed and prominent nasal cones. The entire length of skull is thirty-three inches. The distance between the outer faces of the occipital condyles is 7·8 inches, across the zygomatic arches 13·5 inches. The lower jaw measures 11·6 inches between the outer ends of the condyles, and its length from condyle to front of symphysis is 20·8 in. The canines of the lower jaw are smaller than the last incisor and slightly separated from it. The incisors decrease in size the farther they are removed from the symphysis, and are all directed well forward. (*American Journal of Science*, No. 34, vol. vi. (3) p. 300.)

Geological Map of Australia and Tasmania.—Geological surveys of the Australian colonies have now been in progress for several years, and in Victoria especially the work has been carried on systematically and with great success. The main features of the surface geology of the country are comparatively well ascertained, and it has occurred to the Government of Victoria to endeavour to embody in a general map the results of all the work done up to the present time. In response to an application of the Minister of Mines in Victoria to the Governments of the other colonies an abundance of material has been placed at the disposal of the Mining Department. This has been thoroughly arranged by Mr. R. Brough Smyth and is now, together with the geological sketch map of Victoria, compiled by the same hand, being incorporated into one general map. The New South Wales Government have in preparation a map of their colony which will probably be ready for use sooner than the general map. Some of the more important points established by these surveys are as follow. A great metalliferous belt exists on either side of the main Cordillera extending from Cape Yorke to Tasmania, consisting chiefly of metamorphic schists and granite rocks, covered over large areas by the newer palaeozoic and mesozoic coal-bearing strata.

Another great belt extends from Encounter Bay, S. Australia, towards the Gulf of Carpentaria. Parts of the country between 30° and 23° S. lat. consist of tertiary, and rocks which Mr. Daintree considers to be of cretaceous age. The coal-rocks extend along the coast from Port Curtis, in Queensland, in an almost unbroken line to Eden or Twofold Bay, and are especially prominent at Wollongong and Newcastle in New South Wales. In the Tertiary era Tasmania was united to the mainland. The strict resemblance between the geology of Tasmania and the continent, and the fact of the chain of granite islands, extending from Wilson's Promontory to Cape Portland, being all capped with tertiaries, place this beyond doubt. An immense area of Western Australia is occupied by granitic rocks, with occasional patches of sandstone on the southern coast-lines, while a comparatively small belt of metamorphic rocks occurs to the east of Champion Bay. Below the volcanic rocks in Queensland as well as at Ballarat, the deep leads occur, which in the former colony contain tin as well as gold. To facilitate the rapid identification of the rocks a system of lettering is coupled with the distinctive colours of the various periods. (Condensed from the *Melbourne Argus*, 7th June.)

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History.

Huber on the Jesuit Order. [*Der Jesuiten Orden nach seiner Verfassung und Doctrin, Wirksamkeit und Geschichte characterisirt.* Von Dr. Johannes Huber.] Berlin.

It is hardly possible that a really impartial history of the Jesuits should be written at the present day or for some time to come. No one sufficiently interested in the subject to care to undertake the work could well fail to have a very decided bias for or against the Order, which must inevitably, however unconsciously, colour his estimate of facts. But it is quite possible to be painstaking and conscientious in the statement of facts and citation of authorities, and Professor Huber, who of course makes no secret of his own opinions, may fairly claim this praise. The hundredth anniversary of the Suppression of the Jesuits by Clement XIV., coinciding as it does curiously enough with their expulsion from the German Empire, has suggested to him the idea of drawing up this sketch of their "teaching, work, and history" during the two centuries which elapsed between the formal institution of the Order and its abolition. He fully admits the difficulties of his task, as well from the bewildering multiplicity of materials as from the vehement prejudices which beset the subject on every side. And he very naturally insists on the intimate connection between the Jesuit Society and the modern development of the Papacy, which made it impossible that such half measures as that of Ganganelli, should have any permanent effect. As he himself words it "the so-called Catholic Church of to-day bears the indelible stamp of Jesuitism, which is simply Papism carried to its logical extreme." Ultramontanes would have no quarrel with him as to the matter of fact. And he is only consistent with himself in looking with little satisfaction on Bismarck's anti-Jesuit policy, and that for two reasons: it is not by civil legislation from without, but from within the bosom of the Church alone, that any genuine reform can be effected, and moreover such rough and ready methods of undermining the influence of the Roman Church tend to foster indifference and atheism, and thus to undermine the civilised State itself. But these are *obiter dicta*. The object of the work is not to discuss the problems of the present day, at least directly, but to trace the history of the past. In successive chapters the author treats of the foundation and constitution of the Society, its external action at home and in foreign missions, its ecclesiastical policy, moral and theological teaching, and educational career. Two final chapters are devoted to the Jansenist controversy and the history of the Suppression of the Order under Clement XIV. This mere enumeration is enough to show the wide range of subject-matter compressed into a treatise of under 600 pages, every chapter of which might easily be expanded into a separate volume. There is however a peculiar convenience in having a trustworthy digest in so accessible a form, and it is remarkable that, in all the vast literature, friendly and hostile, which has grown up around the Society, nothing of the kind previously existed.

Born in Spain, "the classical home of the Inquisition," the Jesuit Order bore from the first the impress of the military and despotic character of its great founder, which may be traced alike in the "Spiritual Exercises," the constitution, and the fourth vow, superadded to the three common to all religious Communities, binding its members to accept at once and unconditionally any mission imposed on them by the Pope for the propagation of the faith or good of souls. The principle of "blind obedience," more or less recognised in every monastic Order, received at the hands of Ignatius Loyola a quite exceptional development, involving the absolute surrender both of the intellect and the will, and became the mainspring of the entire system of discipline and teaching of which he is the author. It gave to his Society, which was to be a sort of microcosm of all the Orders in the Church, its speciality as a political engine, which has proved a chief source alike of its influence and of the intense distrust it has provoked in Catholic no less than in Protestant countries, and formed at once the weakness and the strength of its educational method, which was studiously adapted to sharpen the intellect within certain prescribed limits, while sternly repressing independence of mind and character. The Order has been vehemently assailed and as warmly eulogised both in its intellectual and moral aspects, and in neither case without reason. Dr. Huber frankly recognises the eminence of some of its great writers, such as Mariana—the greatest perhaps, but the least distinctively Jesuit, of any of them—while he condemns the scientific and educational system as a whole. Thus again he cites some truly marvellous illustrations of Jesuit ethics, to say nothing of "Marian" theology which recalls the most startling extracts in the *Eirenicon* and Dr. Newman's Letter upon it; but he also acknowledges, what all honest critics would allow, the irreproachable moral character which the individual members of the Society have usually maintained, though there have of course been exceptions—some very gross examples are referred to here—both in its earlier and later history. It is indeed only due to the Jesuits to say that they owe their long term of power in great measure to that continued freedom from internal corruption, and strict fidelity to their rule, which has honourably distinguished them from almost every other religious community in the Church, and has, as was natural, counted heavily as a makeweight against many grave charges of other kinds. The record of most Orders is a succession of declensions and reforms, but there has been no "reform" of the Jesuits. On the other hand they have been conspicuous for their hostility to the older Orders, and are generally in bad odour with them. What may at first sight appear more strange, they have frequently been in antagonism with the Popes, towards whom they acted much in the spirit of the praetorians, who jealously maintained the absolute prerogatives of the Roman Emperors against all dictation except their own. From Paul III., who first approved the Order, to Clement XIV. there were few Popes they did not resist or disobey. To take but a few instances out of many here cited: when Paul V. threatened to condemn their doctrine of grace, Aquaviva, the General, replied, "If your Holiness casts this slur on the Order, I will not answer for it that 10,000 Jesuits will not seize their pens to attack the Bull in writings which will compromise the Holy See." For a century they continued to set at defiance the commands and censures of the Holy See in the famous controversy about the toleration of Pagan customs and ceremonies in China, till Benedict XIV. at last reduced them to submission. When Innocent XI. condemned several propositions of Jesuit theologians, they denounced him as a Jansenist, and prayed publicly for his conversion in the churches at Paris. They maintained their corporate existence in Russia and Prussia, under the pa-

tronage of Catharine and Frederick the Great, after the abolition of the Order by Clement XIV., in spite of censures and excommunications, and in a Jesuit work published in 1814, *Gloria Posthuma Societatis Jesu*, we are informed that "the Empress Catharine availed herself with much prudence of the right all sovereigns have to make their people happy, by forbidding the Jesuits to obey the Pope." And so it came to pass that "the number of members of the Order at the date of its restoration (in 1814) was almost as large as before its suppression," in 1773. There is no need to doubt that in this and in other cases, where their policy is even less excusable, the Jesuits were acting in accordance with what they believed to be the best interests of the Church; but it shows how completely they had learnt to identify those interests with their own.

It must however be borne in mind that the counter reformation of the sixteenth century, in which the disciples of Loyola played so conspicuous a part, was not merely, as Dr. Huber seems to imply, an ultramontane reaction against the reforming tendencies of the age, whether within or without the Church; it was also an instinctive recoil of the Christian conscience from the returning tide of Paganism. The Reformation may have been, in one sense, a religious necessity; certainly for centuries before, and above all during the fifteenth, the cry for a reform had been waxing louder and louder throughout the Church. But its religious side was an accident of the actual movement, not its essence, and its theological influence was almost exclusively destructive; what positive teaching it maintained was pieced together, often clumsily enough, from shreds of the discarded faith. The Reformation was in fact but one phase of a much wider movement of human thought, at once retrograde and revolutionary, first manifested in the Renaissance and culminating in the principles of '89. That movement was essentially naturalistic, and its force is far from being spent yet. The growing anti-supernaturalism of our own day is a phenomenon which can hardly fail to strike even the most moderately attentive observer of contemporary modes of thought, though it does not of course often find such frank, not to say coarse, expression as in Swinburne's poetry. This revived Paganism the Jesuits from the first set themselves to oppose,—often no doubt with very questionable weapons,—and in fighting the battle of the Papacy they felt themselves to be contending against fearful odds in the cause of positive Christian belief. Of their immediate success, in preserving or reclaiming large portions of Europe for Catholicism, there can be no question; but as to the ultimate results of their policy, and still more as to the means employed in carrying it out, there is the widest divergence of view, while there remain several disputed questions of fact on which it is difficult or impossible to pronounce absolutely without further evidence. Thus it may be asked, how far they were exactly responsible for the Thirty Years' War, which Gfrörer says "was at least half their work," while Döllinger speaks still more strongly. There is the controversy about the famous "Reductions of Paraguay," which have gained them such high panegyrics from Protestant writers, like Southey, as well as from their own partisans, but about which Huber shows, by the most unimpeachably Catholic testimony—including that of Pope Benedict XIV.—that a devil's advocate would have a good deal to say. Then again the much vexed question about the death of Clement XIV. is one which seems hardly likely now ever to receive a decisive solution. On the one hand it is quite possible to account for his end by natural causes, and the official report of his physician, Salicetti, was given in this sense; on the other hand, while there is a conflict of medical testimony, there is abundant evidence that Clement believed himself to be poisoned, and this was a very prevalent

opinion at the time in Italy and Spain, and Cardinal De Bernis, who speaks with caution, implies that such was his own belief. If this were so, however, it would still remain to be proved, how far the Jesuits, as a body, or individuals among them, were implicated in the crime. Huber sums up by observing that "a dark mystery hangs over the death of Clement XIV., and the veil is not yet lifted"; probably it never will be.

The two longest chapters in the book are devoted to the religious teaching and practice of the Order, and its educational activity. The first of course brings before us the whole subject of "probabilism" and Jesuit casuistry in general, immortalised by Pascal, as also the startling doctrines about particular subjects, such as tyrannicide—especially of heretical sovereigns—papal absolutism, persecution, and the like, maintained by many of the leading Jesuit divines, and the famous controversy about grace. This chapter will repay careful perusal; it clearly illustrates an extreme laxity of moral teaching on many points, notably as regards truth and falsehood, and an habitual tendency to multiply fanciful, if not superstitious, forms of external devotion; but into these details we need not enter now. The educational success of the Society during the first 150 years of its existence, when it practically controlled the whole higher education of Catholic Europe, was something marvellous. Within less than a century of its foundation it counted 467 colleges and 136 seminaries—for the training of the clergy also passed to a large extent into its hands—and in 1710 the Jesuits are said to have held the chairs of Theology and Philosophy at 80 universities and to have had 612 colleges and 157 normal schools; in 1750, when the tide was beginning to turn against them, there were many hundred Jesuit schools in France alone. Catholic and Protestant authors vie with one another in bearing witness to their triumphs in this domain. Professor Huber fully admits, with the late Mr. Buckle, that in the sixteenth century they were greatly in advance of their age, though in the eighteenth they had fallen behind it, and he emphasises the common indictment against their system of tending to repress the critical faculty and discourage original inquiry and independence of mind. It is remarkable in this connection that they should have manifested from the first an aversion to Church history, which found no place even in their theological curriculum, and was usually treated by Jesuit writers, when they touched upon it, in the spirit of special pleaders rather than of simple investigators of truth. It was only in the reformed *Ratio Studiorum* put out in 1832 by Rootham, then General of the Order, that this subject is first directed to be taught. And the ethical was in close harmony with the intellectual discipline of their colleges, in its rigid suppression of personal confidence and friendship among the students through an elaborate system of mutual espionage. As to the ultimate outcome of their teaching Father Theiner, late librarian of the Vatican, gives very condemnatory testimony in his *History of the Pontificate of Clement XIV.* "It is not enemies but sincere friends of the Society who ask how it has come to pass that, while the Jesuits, on coming to Germany, found great theologians among the secular clergy, who boldly made head against the Reformers with conspicuous success, they left none behind them when, through a special dispensation of Providence, they were obliged to quit the country. Since the Reformation, when the Jesuits obtained exclusive possession both of lay and clerical education in Germany, no Christian land has been so poor in Catholic writers of any mark among the secular priesthood." And Möhler's language is even stronger, when he says that "in their hands dogma became a bare skeleton of intellectual notions, while of course their influence on moral theology was very pernicious." Suarez is unquestionably

the greatest name among them as a philosophical thinker, and Maldonatus is their one great name in Biblical criticism; Cornelius a Lapide, though a very laborious writer, stands on a different level, and is chiefly occupied with the allegorical and mystical interpretation gathered from the Fathers and great theologians of a former age. It is remarkable, when the Order was put on its defence, how incapable it showed itself of holding its own in the literary sphere against the impetuous assault of Pascal and his allies, and how little popular sympathy it was able to evoke—though there are exceptions to this—when all the Catholic Governments in succession turned against it, sometimes, as in Spain, with circumstances of extreme harshness or even cruelty. When the Bull *Dominus et Redemptor noster* at length appeared, the only refuge for the scattered members of the suppressed Order was found under the aegis of the schismatic Empress Catharine and the Protestant Frederick of Prussia, who, with characteristic effrontery, directed his agent at Rome to reply to the remonstrances of the Pope that "he had promised to maintain the Catholic religion in his dominions *in statu quo*, and as he was a heretic the Holy Father could not dispense him from his oath or from his duty as an honest man and a king." We have seen already what effective use the Jesuits made of the support proffered them from such unexpected quarters.

Dr. Huber's work, as we have already implied, has more the character of an essay, or rather of a series of carefully condensed essays, on different leading features of the life and system of the Jesuit Order, than of a continuous history, and so far it falls under the designation of a *Zeitschrift*, but one of exceptional interest and which is likely to retain its value for a good while to come. The time for writing a complete history of the Order is not yet arrived.

H. N. OXENHAM.

Renieri on Blossius and Diophanes. [Περὶ Βλοσσίου καὶ Διοφάνου, ἑρμηνείαι καὶ ἐκκρίσεις Μάρκου Ρενιέρη. Ἐν Λειψίᾳ. 1873.] pp. 204. 8vo.

"THE purport of the treatise" which M. Renieri, the director of the National Bank at Athens, has just published, he himself (p. 183) states "is not to furnish biographies of the Gracchi, but to prove that their designs were considerably influenced by two Greek friends of Tiberius Gracchus—the Stoic philosopher Blossius of Cumae and the rhetorician Diophanes of Mitylene—who aimed at remodelling the constitution of the Roman republic according to the ideas of the politicians and philosophers of Greece." The essay (for such it appears to be rather than an elaborate work) is ingeniously worked out, and all points in which the influence of Greek ideas and theories might possibly be traced are skilfully laid hold of. In spite of this, we confess that we are far from convinced of the truth of the author's hypothesis. According to his view, the real merit of the reforms attempted by the Gracchi would seem due to Greek enthusiasts. Of Diophanes we know but very little, but Blossius stands convicted of reckless enthusiasm by joining the hare-brained enterprise of Aristonicus in Asia. And of such a man Tiberius Gracchus is said to have been the mere instrument! We cannot believe it. It is quite possible, nay it is even extremely probable, that the Roman statesman had originally been imbued by his Greek friends and instructors with that philosophical and cosmopolitan training which subsequently enabled him to overstep the narrow pale of Roman conservatism and to judge of the constitution of his country with impartial eyes. But this does not involve the admission that he was merely put forward by these Greek adventurers as a useful tool for carrying out their ideas, just

as if he himself had had no ideas of his own and had obtained them ready-made from his Greek assistants. There is on the contrary clear evidence to show that rather the reverse was the case, and that in all matters of importance the decision rested with Tiberius, and not with Blossius. In the well-known anecdote related by Cicero in his *Laelius* 11, 37 we read: "C. Blossius Cumanus..... cum ad me..... *deprecatum* venisset, hanc ut sibi ignoscerem causam adferebat, *quod tanti Ti. Gracchum fecisset ut quicquid ille vellet, sibi faciendum putaret.*" It does not exactly agree with the ideal and unbending character of Blossius conceived by M. Renieri, that he should come *deprecatum* and ask pardon; but then he throws all the blame upon Tiberius and declares himself merely to have followed his behests. If Blossius was so craven-hearted as to excuse himself in this way, though he must have been conscious of having been the real instigator of Tiberius' plans, let history abide by this, and give the bold man that *did* the thing also the credit of the idea and conception of it. But perhaps Blossius was sincere: we rather think so from what follows. The question being put to him, "Would you ever have set fire to the Capitol, if Tiberius had ordered you?" he boldly replied, "He would never have ordered me, but had he done so, I should have obeyed him." This is again the language of a mere enthusiast, and perhaps the Romans were right in letting him escape. We cannot accept Blossius as the intellectual author of the Gracchan reforms, but we still recommend this treatise to the perusal of others as a specimen of very ingenious combination of isolated facts. Its weakest point is no doubt the attempted reconstruction of the intentions of Attalus in bequeathing his fortune to the Roman nation: there we should say that the author's sagacity almost overreaches itself. The style of this treatise is very pleasing, though sometimes rather in the manner of French novels than of sober historical writing. The revision of the proofs must have been particularly careless, and there are scarcely two consecutive pages without some mistake or other. The author would have got his book printed much better at Athens than at Leipzig, both in point of correctness and of type.

W. WAGNER.

Notes and Intelligence.

We notice some new arrangements in the historical professorships of certain German Universities. Winkelmann, the author of the best work on the Emperor Frederic II., who has lately published the first volume of the lives and times of King Philip of Suabia and the Emperor Otto IV., has removed from Bern to Heidelberg in the room of Wattenbach, who has accepted a chair at Berlin. At the same time the Prussian Government has at last succeeded in inducing another Heidelberg Professor, Herr von Treitschke, the celebrated popular essayist and spirited patriot, to go to Berlin next Easter. Professor Erdmannsdörfer, one of the editors of the political acts and documents belonging to the reign of the Great Elector of Brandenburg, and author of a life of Count Waldeck, the principal minister of this prince, has exchanged Greifswald for Bresslau, and is to be succeeded in the former place by Ulmann, hitherto at Dorpat, who became favourably known by a life of Franz von Sickingen.

On the 15th October died at Heidelberg A. L. von Rochau, a straightforward and energetic patriot, who in his student days took part in the well remembered Francfort riots of 1833, and shared their melancholy consequences. He saw much of France, Italy, and Spain, and made excellent use of the knowledge thus acquired after he was permitted to return from his exile and travels. His *Geschichte Frankreichs vom Sturze Napoleons bis zur Wiederherstellung des Kaiserthums*, a precise and well meditated abstract of modern French history between 1814 and 1852, was the first work with which the Leipzig publisher S. Hirzel in 1858 started his *Staatengeschichte der neuesten Zeit*. Von Rochau, honest and faithful, was foremost in the group of statesmen and publicists who after 1859 promoted the German National Union, and edited for a considerable time its weekly periodical. He accordingly hailed the great events by which national unity was at length obtained. After having enunciated his doctrine in an important political pamphlet, *Grundsätze der Realpolitik angewendet auf die*

staatlichen Zustände Deutschlands (Heidelberg, 1870), he began publishing in parts a popular history of the German people, and is said to have left nearly finished a biography of Count Cavour for a great collection taken in hand by the Leipzig firm of F. A. Brockhaus under the title of the *Modern Plutarch*, the first volume of which is to be expected by the end of the year.

An important meeting was held in Berlin on the 13th October, having been called by the Academy of Science. The hitherto rather unsettled state of the *Monumenta Germaniae Historica* is to be re-founded on a truly national basis, and with a better working organisation than before. The gentlemen who appeared as well for the old as for the new society agreed to form a central direction composed of Austrian, and South and North German historians, with the power of distributing work to the various sections as projected from the beginning by the great originator of a really grand and vast plan, the illustrious Freiherr von Stein. It is expected that Waitz, Wattenbach, Dümmler, Bluhme, Grotefend, Giesebrecht, Ficker, Stumpf, and Sickel will belong to the leading committee.

There has been a long pause in the continuation of Ranke's *Sämmtliche Werke* since vol. 24, a collection of essays referring to general European and Prussian politics, was issued about fifteen months ago. Though the publishers (Messrs. Duncker and Humblot of Leipzig) were pledged to furnish the public with at least four volumes a year, they actually stopped work, and, rather annoying for subscribers, began reprinting vols. 1-6 with corrections and additions by the author himself. It now appears that the veteran historian was pushing on all the time with wonderful activity to fulfil his engagement. We have at last a stout volume of 522 closely printed pages, but a unique specimen even in the German book trade, as it counts for two, viz. vols. 25 and 26. The contents, however, are most welcome, and very *apropos*. Ranke's *Neun Bücher Preussischer Geschichte*, 3 vols., 1847, 1848, had never been reprinted, and to a certain extent required revision. They now appear in a new dress and under a new title, *Zwölf Bücher Preussischer Geschichte*. But instead of adding to what has always been the conclusion of the book, and continuing the reign of Frederic the Great after the year 1748, the additions are made to the beginning, the first book of the former edition being expanded into four books. In fact we have a new introductory work with a distinct title, *Genesis des Preussischen Staates*, and very valuable indeed, as must be everything coming from such a pen. The clue to it is given in a few words added to the original preface. Ranke agrees that the "origines" of Prussian history of late owe much new light to many happy researches. Yet he adds: "By the events of the last years I felt, as it were, invited to point out more extensively than before in what manner the Brandenburg-Prussian state, which to-day has to act such a great part in the European drama, was originated from the beginning, how it succeeded in reaching the place by which it has been enabled to enter the conclave of the European powers." It is, indeed, highly instructive to observe how the territorial element is mixed up from the beginning with the general. Ranke has contrived to supply within the limits of a single volume a lucid account of the colonisation of Brandenburg and Prussia, of the Hohenzollern Electorate from the fifteenth to the seventeenth century, of Frederic William the great Elector, and of King Frederic I. Nobody can say the same of Droysen's long-winded and entirely unreadable book on the History of Prussian Politics, in which the great outlines of the subject are perfectly smothered by the mass of diplomatic details. Two very interesting documents will be found in the appendix of the new work: the political testament of the Great Elector written in 1667, and his original sketch of a project to obtain possession of Silesia, the importance of which doubtless did not escape the sagacity of Frederic the Great in his time.

We have already pointed out the sterling qualities of K. Klüpfel's *Geschichte der deutschen Einheitsbestrebungen bis zur ihrer Erfüllung 1848-1871*, the second and concluding volume of which has just left the press. It is occupied with the last period of decisive development, the period within the limits of two great wars from 1865 to 1871, and well merits its success by accurate research, clearness of style, and broad national views.

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Philology.

Translations by A. C. Jebb. Bell and Daldy.

Tennyson's *Enone* translated into Latin Hexameters by T. S. Evans. Bell and Daldy.

ONE feels in turning over a collection of classical translations of the old school, of which perhaps one might take the Marquis of Wellesley's as a fair specimen, that the immense skill and tact displayed in them was not so much the result of literary insight as a substitute for it; the translator was not occupied so much with the spirit of either ancient or modern literature as with the relation between the two. But both in the splendid volume, at once chaste and gorgeous, of the public orator of Cambridge, and in the modest pamphlet of the professor of Greek at Durham, the literary impulse reigns supreme; both translators have been guided by a purely literary preference to favourite poems or passages, and have exercised their power as scholars upon them in the same way as under other circumstances they might have exercised their power as critics.

The greater number of Mr. Jebb's translations have appeared already in the *Arundines Cami*, the *Sertum Carthusianum*, and the *Folia Silvulae*, but the translations of *Abt Vogler*, Milton's *Hymn on the Nativity*, and Wordsworth's *Ode on the Intimations of Immortality*, which are new, are more important than any of the old translations, except perhaps the very fine rendering of "Tithonus."

It may be questioned whether in a collection of such a character it was worth while to include so many scraps of excellent Greek Iambics; the volume would have had in some respects a higher literary value if it had been confined to poems complete in themselves: which of course does not imply that no poem should have been translated which could not be translated at length, but that no extract should have been taken which could not be turned into a whole in the course of translation. Otherwise the translations are simply admirable, and worthy of the traditions of the university of Porson. The translation from the "Coming of Arthur," which has not appeared before, deserves especial notice on account of the felicity of the anapaests of Merlin's song.

"Rain, rain, and sun! a rainbow on the lea!

And truth is this to me, and that to thee;

And truth or clothed or naked let it be.

Rain, sun, and rain! and the free blossom blows;

Sun, rain, and sun! and where is he who knows?

From the great deep to the great deep he goes."

τῆδε μὲν αὐγῶν τῆδε δ' ἀπ' ὀμβρῶν
κέχυται πολύχρους ἱρις ἐπ' ἀγροῖς·
ἔστι δ' ἀληθὲς τοῦτο μὲν ἡμῖν,
ὅμῳ δ' ἕτερον· σαφὲς οὖν ἔστω,
κεκαλυμμένον εἰς' ἀκάλυπτον.
ἦδ' ὁ μὲν ὀμβροῖς ἦδ' ἐν εἰλῇ
καλύκων ἀνθεῖ γάνος αὐτοφύες·
τίς δὲ διέγνω θροῦν' ἐλικρινῶν
βροτός; ἐξ ἀφανοῦς προφανέει' ἀφανὴς
κευθμῶνος ἐδέξατο κευθμῶν.

This is hardly short of perfect, for the emphatic repetition of ἡδύ gives the ethical effect of the predominance given to the sun at the beginning of the second stanza of the original.

It is of course a question how far we are entitled to expect equivalents for such points at all, and Mr. Jebb, to judge by his translation of "Tears, idle tears," in which the burden disappears altogether, seems inclined to answer the question in the negative.

There are comparatively few specimens of Latin elegiacs, and this is as well, for the metre does not lend itself to the effects which are most acceptable to the spontaneous preference of the present day, and Mr. Jebb seems hardly to have the instinct for the rhetorical pathos and antithetical clearness to which the Ovidian couplet does lend itself whenever it is made the organ of really interesting poetry. Mr. Jebb's elegiacs are generally faultless and admirable rather than delightful, and in the translation of Longfellow's "Many a Year is in its Grave" we are reminded more than once that the Latin couplet is inevitably longer than the English. But we should have been very sorry to lose the exquisite delicacy of the original called for a little expansion in a language so clear and logical as Latin. There is only one line out of thirty that could be better. The last half of the second stanza of the original is—

"The heart you thought so calm and tame
Would struggle like a captured bird."

That is pure simple literary English: the translation runs thus—

"*Tam, reor, apta iugo, tam scilicet inscia flammae
Corda micant qualis capta columba micat.*"

The line italicised is certainly in a way literary: no doubt it is pure Latin; but it is faultily and obscurely elaborate, and there is a positive ambiguity in *apta iugo*, which would naturally mean "fit for the marriage yoke" when applied to the hearts of two lovers.

Of the Latin Hexameters the most remarkable are "Tithonus" and "The Dying Swan." The latter is a very beautiful poem, even a delightful poem, but its delightfulness is not equivalent to the delightfulness of the original. "Tithonus" is throughout up to the high level of the opening lines, which run as follows:—

*Marcescunt nemorum, nemorum labuntur honores,
Roriferae deflent nubes, oriuntur et arvis
Incumbunt subterque hominum defuncta recumbunt
Secla, nec aestates non decidunt oloris.
Solus ego immortale trahens aegerrimus aevom
Carpore: inaresco, te complectente, quietum
Limen ad hoc mundi, dum cana remetior umbra
Secretas orientis imagine vanior aulas,
Multiplices nebulas, sublustria templa diei."*

The original of the line and a half italicised is—

"The woods decay, the woods decay and fall,
The vapours weep their burthen to the ground."

Perhaps the first line is deeper and simpler, and certainly the second is fuller and clearer, in the original than in Mr. Jebb's translation.

There is only one translation into Sapphics, and it can hardly be called successful: the apostrophes which begin the two first of Keats' stanzas—

"In a drear-nighted December,
Too happy, happy tree,"

and—

"In a drear-nighted December,
Too happy, happy brook,"

are irreducible to the forms of Horace or even of Catullus; at least they have not been reduced here, and though there is a good deal in the rest of the poem that recalls Horace, it principally recalls his ambitious ambiguity. However the rendering of the last stanza is really good.

The Asclepiads on Diaphenia are about good enough for the original, though it is doubtful whether an enthusiast for Elizabethan literature would think so. The stanza of *In Memoriam* that begins—

"Witch-elms that counterchange the floor"
is turned into a perfectly delicious epode in Iambic trimeters and dimeters.

Another stanza is turned into an admirable Alcaic Ode, in which the skill shown in specialising the allusions deserves the highest praise. All the Alcaic odes are good, with one exception: perhaps the best may be said to be the translation of Campbell's *Last Man*, where the difficulty of changing from ten-line to four-line stanzas is conquered so completely that one hardly perceives it must have existed. In the translation of Milton's *Hymn on the Nativity* the translator has been less successful. Every stanza of the original makes just two in the translation, and in such a long poem the subdivisions ought to be more varied, and one feels upon the whole, in spite of an abundance of felicities, that Horace is a better guide than Statius as to the proper length of an Alcaic Ode; moreover it is doubtful whether *stabulum regale* is an adequate translation of "the courtly stable."

Still the translation of Milton is better than the translation of Wordsworth into Greek Hexameters: one may certainly say that it is a great feat to have transferred the thoughts at all into real Greek, which is sometimes very rich and musical, as here,—

μίμουσαν δὲ βροτοῖς ἐκ πημονέων παλινρτοί
φροντίδες ἡδύπνδοι, πλοῖσι μὲναι ἢ τε δέδορκε
καὶ τὸ πέριθ θανάτοιο, μένουσι παρηγορήσας
σωφρονέειν ἀδολοῦσι παρηγορήσας ἐνιαυτοῖ.

But taking the poem as a whole it is dull; at least one feels too often that the fiery clearness of the original is quenched; more than once one suspects the profusion of particles of serving as *chevilles*, and there are other traces such as we find in the Greek philosophical poets of working in a medium not perfectly plastic.

It is difficult if not impossible to describe the masterly rendering of *Abt Vogler* in the metres of the Fourth Pythian. Of course it was impossible to translate Browning into the style of Pindar or any Greek poet, but the translation is notwithstanding a magnificent poem in real Greek.

Here is a stanza with its translation,—

"But here is the finger of God, a flash of the Will that can,
Existent behind all laws, that made them and, lo, they are!
And I know not if, save in this, such gift be allowed to man,
That out of three sounds he frame, not a fourth sound, but a star.
Consider it well: each tone of our scale in itself is nought;
It is everywhere in the world—loud, soft, and all is said:
Give it to me to use! I mix it with two in my thought
And, there! Ye have heard and seen: consider and bow the head!"

νῦν δὲ δαίμων ἐξεκάλυψε βλαν
ἀστραπὴν ὥς, παντοπόρου κραδίης, θεσμῶν κρεφαῖον τέκτον' ἀριπρεπέων·
πῶν γὰρ ἐξήν ἄλλο βροτοῖς τι τοῖονδ', οἷον κτύπους τρεῖς συμπλάσσει
μὴ τέτρατον κτύπον ἀλλὰ σέλας πᾶμφλεκτον αἰρεν;
αὐτὸ τοι ἄρμονίας φώναν' ἕκαστον εὐτελές,
δαυδῶν, μέγ' εἶπε λεπτόν, ῥῆμ' ἀπλόον· τὸ δ' ἐγὼ κεράσας
σὺν δυοῖν ἄλλοις τί τεύξ'; ἡκούσας', εἰδετε·
θέσκελον θαυμάζετ' ἄλκων.

Almost the only point that calls for criticism in Canon Evans' translation of *Cenone* is that he has thought right to vary formulae which Tennyson repeats without variation.

Thus—

"O mother Ida, many-fountained Ida,"

is sometimes—

"O mater, liquidis celeberrima fontibus Ida,"

and sometimes—

"O mater, scatebrisque frequens et fontibus Ida;"

and—

"O mother, hear me yet before I die,"

is twice—

“Mater, quam morior prius hanc quoque percipe vocem,”

once—

“Mater, et hanc porro morituræ percipe vocem,”

once—

“Accipe quam morior, mater, prius hanc quoque vocem,”

and once—

“Mater, et hæc a'di quæ verba novissima dico.”

There are passages in the original like this—

“O happy tears, and how unlike to these!

O happy Heaven, how canst thou see my face?

O happy earth, how canst thou bear my weight?”

that suggest Catullus rather than Virgil, but taking the poem as a whole it is impossible not to approve the translator's judgment in being consistently Virgilian. Here is a passage full of legitimate felicities—

“Yet, mother Ida, harken ere I die.

Fairest—why fairest wife? am I not fair?

My love hath told me so a thousand times.

Methinks I must be fair, for yesterday

When I past by, a wild and wanton pard,

Eyed like the evening star, with playful tail

Crouched fawning in the weed. Most loving is she?

Ah me, my mountain shepherd, that my arms

Were wound about thee, and my hot lips prest

Close, close to thine in that quick-falling dew

Of fruitful kisses, thick as Autumn rains

Flash in the pools of whirling Simois.”

“Hanc quoque quam morior, mater, prius accipe vocem.

‘Quæ pulcherrima’ enjam—quānam ‘pulcherrima?’ Pulchram

Mene neque esse? Frequens juravit me quoque pulchram

Noster amor. Dubitemne? At heri se propter eunti

Astra gen. ns oculis mihi, dum lascivit, in ulva

Pardus adulanti similis caudamque remulcens

Subsedit. Quid? amatne virum magis omnibus una?

Ah! si monticolæ circum ambitiosa dedissem

Brachia pastori premeremque ardentia labra,

O formose, tuis: uberrima basia raptim

Impluerent, velut autumnum dum plurimus imber

Desiliens torto Simoentis in amne coruscat.”

G. A. SIMCOX.

THE DISCOVERY OF FRESH MSS. OF AVERROES.

In Huet's *De interpretatione et claris interpretibus* i. 185 (ed. Hag. 1683 = p. 141 ed. Paris. 1680) we read the following words of Casaubon: “Vix ullos Averrois Arabicos codices in Europa reperiri posse putabat Scaliger.... Ego tamen his versavi manibus Arabicum Averrois librum, ex oriente huc olim a Postello devectum; quod miror Scaligerum fugisse, Postello olim amicitia et literaria consuetudine coniunctum. Eo libro continentur in Logicam, Rhetoricam et Poeticam commentaria.” Renan says in his *Averroës et l'Averroïsme*, p. 80, &c. (2nd ed.), that he for a long time suspected the accuracy of this statement, but that, after he had examined the Florence MS., which contains an Arabic commentary on the Organon, he changed his mind and now believes that this was the MS. intended by Casaubon. I am enabled, by a fortunate circumstance, to prove the injustice both of the original suspicion and the subsequent conjecture of M. Renan. After finishing the catalogue of the Leyden collection of Oriental MSS., I resolved to append a description of the smaller collections which might exist elsewhere in Holland. Upon my request for information on this subject, I received *inter alia* intelligence from Mr. M. F. A. S. Campbell, principal librarian of the Royal Library at the Hague, of the existence there of 28 Oriental MSS., which had as yet been scarcely examined at all. Most of these MSS. were derived from the library of Clermont, and bear the inscription *Paraphé au désir de l'arrest du 5 Juill. 1, 1763, Mesnil*. It turned out that one of these MSS. was the Arabic commentary of Averroës on the Organon referred to by Casaubon. It answers entirely to the description, and has the signature of Postello at the end.* It is a beautiful MS. in Moorish writing, collated with another MS. and with a few good marginal notes. The margin has suffered somewhat from worms, but no part of the book itself is injured. A comparison with different passages of the Florentine MS. (Medic. Laurent. clxxx. ap. Asseman p. 325) given by Prof. F. Lasinio, of Pisa, in his *Studi sopra Averroë* (I have not been

able to consult his edition of the *Poetics*), shows that the Postell MS. is, if not of greater, certainly of equal value. A few glosses, received into the Florentine text, are wanting here as well as in the Hebrew translation; for a few errors of the text, corrected by Prof. Lasinio, our MS. presents the true reading; while several corrections will have to be introduced from this codex into the published fragments of the text, against only one passage, where the reading of the Florentine MS. deserves the preference.

But even more important is the discovery, made at the same time, of another work of Averroës, the Arabic text of which was supposed (see Renan, p. 83) to be no longer extant. I mean “the great commentary” (as opposed to “the middle” commentary and the paraphrase) on Aristotle's *Metaphysics*. This MS. is described at length in the 5th part of the catalogue of the Leyden collection (p. 324, &c.), which is now ready for circulation, so that I need only state that it is clear from this codex, that Ibn Roshd himself wrote no commentary on books x, xii, and xiii (in other editions xi, xiii, and xiv), but that this was afterwards composed in his spirit, and attached as an appendix to the work (comp. Renan, p. 63). Most probably the Arabic translation of chap. i. of Aristotle's *De Cœlo et Mundo*, found in the same collection and transcribed by the same hand as the commentary on the *Metaphysics*, is also the work of Averroës.

After the catalogue was already printed off, I received some information from Mr. Campbell relative to the origin of this collection, which, I think, deserves to be published. On the dissolution of the order of the Jesuits in France, the entire library of Clermont (initialled by Mesnil) passed into the possession of Johan Meerman. Before bringing the MSS. to Holland, the new possessor parted with a few of them to the Bibliothèque Royale of Paris. This he did at the special request of the King, by whom he was raised to the rank of chevalier.

The remaining Clermont MSS. became part of the rich library of Meerman; he arranged them himself, and sold a part which did not fall in with his own taste. The rest came to the market with his other collections in 1824, and were scattered to the four winds. In particular Sir Thomas Philips, of Middlehill, made large purchases, which together with thousands of MSS. and charters remain under the care of trustees.

Thus far Mr. Campbell. Of the Hague collection, 15 MSS. came from the Clermont library, 10 were purchased in 1816 at the Royer auction, the rest are presents from different persons. At my request, they have all not long ago been brought over from the Hague, and added to the Leyden collection.

M. J. DE GOEJE.

Notes and Intelligence.

At a meeting of the Society of Biblical Archaeology on Nov. 4th, Mr. George Smith read two valuable papers on Babylonian and Assyrian Chronology. In the first he gave an account of some fragments he has recently discovered which he believed formed the basis of the history of Berosus; but Sir H. Rawlinson suggested that the tablet was rather a list of Prefects, on the ground that in no case did a son succeed his father, while the several groups were too small to constitute separate dynasties, and we know from another source that one of the persons named was a Prefect of the Palace. In this case it would seem that whereas the Assyrians reckoned by yearly eponymes, the Babylonians reckoned by the succession of Palace Prefects. However the persons mentioned are expressly called “kings,” and one of them is said to have been an usurper. The word, too, used to denote their term of office is the one which commonly signifies “reign.” The second paper described the newly-found fragment which contains the name and annals of Shalmaneser (see *Academy*, Oct. 15, 1873, p. 400), and compared the Assyrian and Hebrew chronologies.

We are glad to learn that Mr. Smith is about to start again for the East. This time he is being sent out by the Trustees of the British Museum.

Contents of the Journals.

Revue Celtique, vol. ii. pt. 1.—Adolphe Pictet: Some Celtic names of rivers. [Shows that the names *Dêva*, *Dîva*, *Divona* and our *Dee* point to Celtic river-worship.]—M. H. Kern: Nehalennia. [Makes her out to be a Germanic (not Celtic) divinity identical with Freya.]—A. Réville: An altar to Nehalennia found near Domburg in Zealand.—J. G. Bulliot: The ex-voto of the Dea Bibracte.—D. S. Evans: Supplement to the *Cambrian Bibliography*.—G. Lejean: The popular poetry of Brittany. [An excellent sketch of the history of the Breton school of patriots represented by Legonidec and Villemarqué.]—R. F. Le Men: Breton proper names beginning with *ab* or *ap*. [A careful localizing of these names in Léon: but when it is further maintained that this district must have been colonized from Wales it is forgotten that Welsh *ab* or *ap* (for *rað* from *map*, “son”) appears in Wales only in comparatively modern times.]—L. F. Sauve: The proverbs and adages of Lower Brittany.—W. H. Hennessy: The battle of Cnucha. [Irish text from *Lebor na huidre* with translation—goes against all]

* What Casaubon says, that Postell († 1581) brought this MS. with him from the East, is confirmed by a note of Postell in a carefully written MS. containing two parts of the Canon of Avicenna, and also in this collection, in which he relates that he bought it at Constantinople in 1536.

attempts to localize Ossianic tales in N. Britain.]—Eug. Hucher and A. de Barthélemy: Supplementary remarks on the legends of Gaulish coins.—Hucher and H. d'Arbois de Jubainville: Durnacos: a passage of arms in which the latter gets the advantage.]—H. d'A. de Jubainville: A Gaulish *f* standing for *dh*. [Hardly convincing.]—W. Stokes: The Klosterneuburg incantation. [Gives the correct text and a translation.]—John Rhys: Etymological scraps. [Shows that mod. Welsh *dd* sometimes stands for original *y* semivowel.]—Among the reviews H. d'A. de Jubainville's on Littré and Brachet's French dictionaries contain some excellent remarks, but mod. Welsh *banadl* is not to be derived from **banadilla* but from **banatila*, and if French *juif*, Breton *jusev*, Welsh *Iudew*, prove the existence of a vulgar Latin *Judevus*, he must suppose also *olevum* (= oleum) and *putevus* (= puteus), for Welsh has *olew* and *pydew*.

Hermes, vol. viii., pt. 1.—M. Haupt: Coniectanea.—V. Rose: On the *Medicina Pini*. [Draws attention to a manuscript treatise of practical medicine abridged from Pliny and dating apparently from the first half of the fourth century. Other medical books based on similar materials are also discussed.]—Th. Mommsen: On a Latin glossary in Cod. Vat. 2730. [Prints a fragment of a glossary which Caspar Barth seems to have known in its complete form.]—H. Jordan: On Latin prose authors. [Contains among other things some valuable remarks on the *Rhetorica ad Herennium*.]—A. Eberhard: On the epitome of Valerius Maximus by Januarius Nepotianus. [Suggestions on the text.]—A. Luchs: Contributions to the textual criticism of Plautus.—A. Eberhard: On Horace. [On his use of the tribach in iambic lines.]—R. Hirzel: On Plato, *Politicus* 267 C seqq.

Journal of the German Oriental Society, vol. xxvii. pt. 3.—H. von Maltzan: Dialectic Studies on the Mehri compared with the cognate idioms. [A valuable addition to our knowledge of the phonology and grammar of the language. The Maghrib, Egyptian, Hijaz, Yemen, and Hadramaut are the vulgar dialects compared.]—Blau: Linguistic Studies on Old Arabic, with a map. [The diminutive-form *-ai* as a characteristic of Old Arabic, traced from the Ælanitic and Persian Gulfs to Edessa and Mosul.]—Mögling: Yeimini Bhārata, chapter ii. [Translated from the Canarese, with notes.]—Schrader: The Origin of the Chaldeans and the Primitive Home of the Semites. [See below.]—Grill: On the relation of the Indogermanic and Semitic Radicals. [The historical priority of biliteral roots assumed, because logically prior to triliteral. Aryan vocalism and formalism contrasted with Semitic consonantalism and materialism.]—Schweinfurth's Linguistic Results of Travels in Central Africa; reviewed by Pott. [Favourable. New data for Comparative Philology pointed out.]

Selected Article.

The Origin of the Chaldeans and the Primitive Home of the Semites; by E. Schrader, in *Jrnl. of German Oriental Society*, vol. xxvii., pt. 3. [The Northern Semites (Hebrews, Assyrians, Arameans) and the Southern Semites (Arabians) are separated from one another by their theology, mythology, and linguistic characteristics. Comparative grammar shows that Northern and Central Arabia was the original cradle of the Semites, whence they dispersed in all directions. The Northern Semites were long settled in Babylonia, where they borrowed their mythology and a portion of their lexicon from their Turanian (Accadian) neighbours. The latter kept up a connection with South Arabia, which explains why Nimrod is called the son of Cush.]

New Publications.

- BENICKEN, H. R. Das 3^{te} und 4^{te} Lied vom Zorne d. Achilleus nach Karl Lachmann aus I und Δ der Ilias hrsg.: Theodor Bergk und die homerische Frage begleitet. Halle: Mühlmann.
- GROTH, K. Ueber Mundarten und mundartige Dichtung. Berlin: Stilke.
- HADLEY, J. Essays Philological and Critical. Macmillan.
- HAHN, K. A. Auswahl aus Ulfilas gothischer Bibelübersetzung, mit einem Wörterbuch und Grundriss zur gothischen Buchstaben und flexionslehre. Dritte Auflage, hrsg. und bearbeitet von A. Jeitteles. Heidelberg: Mohr.
- KOELBING, E. Ueber die nordischen Gestaltungen der Partonopeus-Sage. Strassburg: Trübner.
- MICHEL, E. Storia della pedagogia in Italia nel secolo xiv. 1301-1400. Siena: Tip. Sordo Muti.
- PICOT, E. Documents pour servir à l'histoire des dialectes roumains. I. Paris: Maisonneuve.
- RAABE, A. Gemeinschaftliche Grammatik der arischen und der semitischen Sprachen. Leipzig: Klinkhardt.
- SCHAPER, C. De Georgicis a Vergilio emendatis. Berlin: Calvary.
- STRAUB, L. G. Ad Trinumum et Bacchides glossarii. Pars i. Tübingen: Fues.
- VOLLMER, W. Wörterbuch der Mythologie aller Völker. 1. Lfg. 3. Aufl. Neu bearbeitet von W. Binder. Stuttgart: Hoffmann.

ERRATA IN No. 83.

Page 403 (b)	10 lines from top, for "Landon" read "Randon."
" 408 (b)	10 " " " "Vision of Judgment" read "Vision of Sin."
" 409 (a)	10 " " " "Hist. ii." read "Hist. i."
" (b)	Note " " "metaphrastes" read "Metaphrastes."
" 418 (a)	9 " " "welcome" read "welcomed."
" 420 (a)	26 " " "Luchmann" read "Lachmann."

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REGISTERED FOR

MONDAY, DECEMBER 1, 1873.

TRANSMISSION ABROAD.

[Price 6d.]

General Literature.

Pitrè's *Sicilian Folk-Tales*. [Otto fiabe e novelle siciliane, raccolte dalla bocca del popolo ed annotate da Giuseppe Pitrè.] Bologna.

THE well-known editor of the *Canti popolari siciliani*, Dr. Giuseppe Pitrè of Palermo, has for some time been engaged in collecting and annotating the folk-tales of Sicily, and he expects, before long, to publish the result of his labours—in the shape of the fourth and fifth volumes of his *Biblioteca delle tradizioni popolari siciliani*. In the meantime he has reprinted from the *Propugnatore* eight of these tales, and has sent them forth in pamphlet form, as a specimen of his forthcoming work. The edition appears to have been limited to 30 copies, so that the *brochure* is not likely to fall into many hands. But all students of popular literature who make acquaintance with it will augur well from its appearance for the merits and the success of the work which it heralds.

The folk-tales of Sicily are already well represented, and have been rendered widely familiar by Signora Laura Gonzenbach's *Sicilianische Märchen*. But even those readers who most thoroughly esteem and prize her at present invaluable work will feel deeply indebted to Dr. Pitrè for enabling them to listen to the exact words of the Sicilian story-tellers, and to call up before their mental vision the heroes and heroines of the Sicilian folk-tales in their national costume, unaltered by the disguise of a foreign garb. So many special ideas are associated with each distinct language that a translated poem—and genuine folk-tales are for the most part poems in prose—cannot fail to lose, so far as its readers are concerned, many of its primary characteristics, and to find them replaced by others to which it was originally a stranger. In the case of languages which are very closely connected the change may not be more violent than that which a melody undergoes when it is transferred from one key into another, but where families of speech have very long been severed, transference from one to another cannot be effected without a wrench, and the effect upon what is transferred may be similar to that which Russian marriage songs so often lament in the case of a young bride who leaves her happy home to pine away "in the far off, stranger land." The Popular Tales of each

country are full of such expressions as are actual songs to a native ear, of such caressing diminutives and other terms of endearment as not only prove melodious in themselves to hearers who have always been familiar with them, but awaken musical echoes in their hearts for which only such a life-long familiarity can account. Such words or formulas of words as these, however, when literally translated into a foreign tongue, are apt to lose all their subtle influence; and if they are represented by such equivalents as occur to the audacity of a "spirited" translator, their hearers too often find the illusion dispelled which they would fain preserve, are too often deprived of the enjoyment felt by one who in fancy seems to breathe a strange but genial atmosphere, to wander beneath an alien but kindly sky.

It is this charm of language which renders these Sicilian tales in their present form so delightful. The mere sight and sound of them are enough to evoke such Southern fancies as can only be called up by a distinct effort of the imagination on the part of at least most English readers of German versions—however faithful they may be—of Italian tales. Apart from their diction there is not much that is novel in Dr. Pitrè's specimen stories. The first, "Lu Re di li pira d'oru," is the well-known tale of the younger brother who discovers and slays the stealer of his royal father's golden fruits; who, on his return with three sister maidens from that hostile being's subterranean abode, is robbed of the reward of his courage and skill by his elder brothers, but who eventually frustrates their knavish tricks and recovers his bride and his father's good opinion. The story has been fully discussed, and its numerous variants mentioned, by Reinhold Köhler in an article, referred to by Dr. Pitrè, in the *Fahrbuch für r. und e. Literatur*, vii., 1, 24-27. In the present version the fruit-stealer is a giant on horseback—"un gran giaganti a cavallu." The friendly advisers of the Prince-Errent are—the Three Hermits so frequently met with in Italian folk-tales, who tell him where to find the Giant, and how to chop off his head—Three Mountains, the first of bronze, the second of silver, the third of gold—and an Eagle, whose crow-stolen eaglet he restores to her, and who explains, after the Giant's death, that the Three Mountains were once Princesses, and have now resumed their pristine form—"ora ca lu giaganti muriu, chisti su' cristiani arrieri." The use of the word

Cristiani in the sense of "women" is noteworthy, and may be compared with that of the analogous Russian term *Krestyane* for country people.

The second story—"La Bella di li setti citri"—is a variant of No. 13 in the *Sicilianische Märchen*, "die Schöne mit den sieben Schleiern." One of the points in which the stories differ is worthy of notice. The "Seven-Veiled Beauty" will die unless water is given to her the moment the coffer is opened in which she has been concealed; the Lady of the Lemons is of a different nature. The King of Spain's son who seeks her hand is told that when he has gathered the Seven Lemons he is to open one, and say to the lady who will emerge from it, "Acqua, signora!" If she refuses the proffered beverage, which appears to be a "Water of Life," he is to try a second fruit, then a third, and so on. If he cannot succeed in inducing one of the lemon-ladies to drink, he will be turned into a marble statue. He unsuccessfully opens six lemons, the lady in each instance rejecting his proffered refreshment with a "Un nni vuogliu." But from the last lemon emerges a beautiful lady "tutta vistuta di culuri di rosi" who takes a drink—"Idda subito vivi"—whereupon the spell is broken and the marble statues, the Prince's predecessors, all come to life. A curious Norse version of this story is given by Asbjørnsen in No. 66 of the "New Series" of his *Norske Folke-Eventyr* (Christiania, 1871). In it there are three Princesses enclosed in as many lemons (*Tre Citroner*). The thirsting hero bites a piece out of each lemon. In each case appears a fair lady who at once declares she must immediately have some water or she will die. Water being scarce, two of the ladies keep their word and expire; the third is saved. The Southern origin of the Norse tale is plainly enough evinced by the lemons from which it derives its name. Some Norwegian sailor, most probably, heard the story in Mediterranean waters, and brought it back with him to his Northern home.

The third tale is one which is to be found in Straparola's *Tredici piacevoli notti*, and is the same as the story which is so popular in Russia under the name of "Ermilian the Fool," or "By the Pike's Command." The fourth, "L'omu cavaddu," or "The Horse-Man," is the well-known tale of the boy who turns himself into a horse, and is sold, under that shape, by his father. The father is warned by his son that he must retain the bridle, but at last he allows it to be carried off, along with the horse, by the magician who has been his son's master in the Black Art. The boy thereupon becomes his master's slave, but at last effects his escape. Of this story, and of its introduction into Europe from the East, a full account is given by Benfey, *Pantschatantra* i., 410-13. In the present version the usual transformations at the end do not occur, the magician behaving kindly to his pupil, on whom he bestows the hand of his only daughter. The fifth story, "Li Batioli," or "The Nuns," belongs to that class of robber tales of which "Morgiana and the Forty Thieves" is the best known representative. The sixth, "Li tri Brinnisi," is one of those stories, so dear to the Italian mind, about a faithless wife and her confessor, in which she, the servant lad, and the "cunfissuri," sing each a *brinnisi*. The seventh, "Lu Mastru Scarparu filosofu," is almost the same as Straparola's story of "Papiro Schizza-pedate." One of the expressions used in it is curious. The "philosophical" master points to his wife, and asks the lad who serves him what she is called. "La maistra," replies the boy. "No," exclaims the pedant, "her proper name is *grolia 'ntua*." This would be somewhat unintelligible did not Dr. Pitre explain in a note that "in Latin words the people are wont to unite the last consonant of a leading word with the first of that which follows it," whence *grolia*

'*ntua* for *gloriam tuam*, or *agnu sdeu* for *agnus Dei*, &c. The eighth and last story, that of "Lu surci grassu e lu surci magru," is closely akin to our own "Town and Country Mouse," and to the original from which that fable sprang.

By way of giving some idea of the dialect of these specimen tales—which, on account of their intrinsic merits as well as of the manner in which Dr. Pitre has treated them, lead us to expect much from his completed work—we will quote the concluding paragraph of the story of the two mice:—

A lu trāsiri 'nta lu maasenu, prima si 'nfilò lu surci di maasenu, e comu si 'nfilò chiama:—"Cumpari surci di jardinu!" E comu chiama, gnau! jètasi un gattu, e si l'afferra 'nta li grāfi. Lu surci di jardinu comu senti fari *siu! siu!* si jetta nn' arrieri e sfilletta; e di ddocu nni vinni ca

Cei dissi 'u surci magru ô surci grassu:
"Si scappi, 'nta li vrocchi t'aspettu."

W. R. S. RALSTON.

LITERARY NOTES.

The *Librairie des Bibliophiles* is publishing in its collection *Les petits chefs d'œuvre* the *Contes* of Hamilton, than which it would be difficult to find anything more deserving of the name. We have received *Le Bélier* and *Fleur d'Épine*—the latter one of the delights of Fox—in type and paper quite worthy of the dainty grace of the style,—the style that even Sainte Beuve thought it impossible to describe better than in words borrowed from the author, when speaking of his sister and muse, who married the Chevalier de Gramont . . . "un visage tout aimable . . . Son esprit étoit à peu près comme sa figure. Ce n'étoit point par ces vivacités importunes dont les saillies ne font qu'étourdir qu'elle cherchoit à briller dans la conversation; elle évitoit encore plus cette lenteur affectée dans le discours dont la pesanteur assoupit; mais sans se presser de parler elle disoit ce qu'il falloit et pas d'avantage." In these fairy tales the author of the *Mémoires de Gramont* gently ridicules while indulging the fashionable rage of the day for fictions à la *Mille et une Nuits*; some of the scenes are gems of light poetical description, and the introduction to *Le Bélier* is in verse of a kind that seems so admirably suited to the genius of the French language that it is one of the puzzles of literature to explain why, besides having no master and few rivals in its use, Hamilton has also had hardly any followers or imitators; not less charming is the comic effect produced by touches of ironically graphic description and by the flights of a fertile fancy ingeniously employed in inverting all the rules of sober narrative composition. It is the highest praise that can be given to *Alice in Wonderland* that we are now and then reminded in it of the artistic inconsequence of Hamilton's style, though in finish and execution there is of course all the difference between the furniture of an English nursery and a drawing-room *Louis Quatorze*.

A recent number of the *Nyt dansk Maanedsskrift* contains an interesting and exhaustive study, by Dr. Brandes, of the Danish poet Hauch, who died at a great age last year. Besides a brilliant examination of Hauch's dramas and lyrics, the paper contains an interesting account of the feverish controversies which occupied the first years of his literary life, his defence of Oehlenschläger against Bagesen, and the violent attacks which were made against himself. It is strange to read on the next page that it was a remark by Oehlenschläger himself, depreciating the qualities of Hauch's poetry, that silenced the Muse of the latter for seven years. Hauch, by the way, though classed among Danish poets, was born in Norway in 1790.

Mr. Disraeli's Inaugural Address to the University of Glasgow (Longmans) would have its real merits—as a model of literary style and rhetorical art—more fairly appreciated were it not for its *apropos* as a political manifesto. The exordium on self-knowledge, its uses, and the scanty help given to the young by their natural superiors in its acquisition, was brilliant, sincere, and without *arrière pensée* in its cynicism. But all the orator's art was required to disguise the underlying moral purpose with which he insisted upon the importance, to

intelligent young Scotchmen, of understanding the spirit of their age, as well as the bent and powers of their own minds, and assured his hearers that, if the spirit of the age was an evil spirit, success in life might consist with resistance to it, if such resistance were based upon adequate comprehension. To assist the Glasgow youth to such comprehension, Mr. Disraeli proceeded to explain that the spirit of this age is a spirit of equality, and that there are different sorts of equality, to wit, civil equality, which is the pride and privilege of Britons, social equality, which has been the dream and the bane of the "gifted people" of France, and material equality, which is sought by the "disturbing spirit which is now rising like a moaning wind in Europe," and threatens the existence of private property. It would be hard to find a better example of sound rhetoric and false reasoning than Mr. Disraeli's treatment of social equality as fatal to an aristocracy of talent by abolishing classes—as if civil equality did not abolish the relation between class-rank and the exercise of political power, and so for all purposes of aristocracy practically abolish classes; and his treatment of material equality, or a belief in the "rights of labour" as tending to abolish patriotism, and "abrogate countries," a threat which could be depended upon to escape criticism in Scotland—which might not care to remember that it ceased to be a country, much to its advantage, a good many years ago. A better argument against the coarser socialist ideals of equal physical enjoyment was offered in the suggestion that a population enervated by the attainment of a dead level of material ease would fall a prey to the tyranny of a naturally selected aristocracy. It would be interesting to know how many of the academical audience noticed the ex-Premier's omission to explain why natural selection could only produce an aristocracy of the wrong sort in the wrong place; to any such the address would have a wholesome stimulating influence.

JOHN GOUGH NICHOLS.

THE antiquarian world has lost in John Gough Nichols a sound and zealous friend. He was, Dec. 3, 1835, elected F.S.A. of London, and subsequently corresponding F.S.A. of Scotland and Newcastle; was V.P. of the Middlesex Archaeological Society; on the council of the Surrey Archaeological Society; and an active supporter of other bodies. He was by descent an antiquary. His grandfather, the Historian of Leicestershire, was followed by John Bowyer Nichols, and these by the latter's son. All careful men and all learned, yet it was left to the latest to embrace the erudition and to augment the painstaking of the two preceding. For upwards of forty years his care and attention have been devoted to the study of antiquity, and especially of genealogy. From 1830 the volumes of the *Archæologia* have contained the results of his labours, sometimes accompanied by exhibitions, sometimes by remarks worked out with great diligence and persevering industry; his communications have extended down to the latest period, one on a favourite subject with him—the Guilds—being still unpublished. He was for very many years sub-editor and afterwards editor of the *Gentleman's Magazine*, and under his direction and the supervision of its different editors (Mr. Mitford and Mr. Bruce) it maintained itself as a correct and good depository of facts; indeed it was Mr. Nichols' great care in exposing all "false claims to titles and pseudo-genealogies" which enabled him to render great service to historical truth. His knowledge was general and well applied, and on the committees of the mother society—whether the genuineness of the Paston Letters was to be established, the public sepulchral Monuments to be catalogued for preservation, or the Parish Registers and Inscriptions in our graveyards and churches to be kept and catalogued—his acute mind and his wide acquaintance with the history of his country stood the society in good stead. In 1833 the *Collectanea Topographica et Genealogica* was started under his care, though without his open announcement as editor: that publication ceased in 1843, and then in 1846 the *Topographer and Genealogist* followed, with him as avowed editor, and in 1863 that work was followed by the *Herald and Genealogist*. In all these publications the erudition and the fearless exposure of errors and of false pedigrees stand out most prominently. Nor were these periodical works his only claim upon literature.

In 1844, in conjunction with Mr. Shaw, he reprinted Anthony Munday's Fishmongers' pageant "*Chrysanaleia*" of 1616, with illustrative documents and an historical introduction, he being a member of the Stationers' Company. In 1845 he published examples with drawings of decorative tiles; in 1852 the literary remains of his friend John Stockdale Hardy; and in 1857 he edited the *Literary Remains of King Edward VI.* for the Roxburghe Club. Prefixed to the work is a biography of the King, which displays to its fullest extent the minute care with which everything proceeding from Mr. Nichols' pen was produced, the fulness of the information, the soundness of the deductions, and the wide scope of the inquiries. The different public depositories were all searched with the greatest diligence, every available source of information was made use of, and the whole gives us a nearly perfect picture of the King and of his times. The same knowledge and the same diligence and research which he used for his own publications he willingly gave to other editors, and no one of the Camden Society's works, where he aided the different editors, is without the marks of his skill, his research, and his ability. With that society he was from its foundation in 1837 most closely connected. For it in 1859 he edited *Narratives of the Days of the Reformation*, chiefly from the MSS. of Foxe the Martyrologist, with two contemporary biographies of Abp. Cranmer, and other volumes were edited by him; the Catalogue in 1862 was his own work, and his advice often helped the council in more difficult matters. Some of his lucubrations indeed grew considerably under his editorship, and that which was begun as a thin volume not unfrequently ended in a thick work, which nearly exhausted the particular subject under notice. For this he used, what he was well acquainted with, our stores of MSS. in the British Museum, the Bodleian Library, and those which were till recently scattered in many places, yet are now to be found in the Public Record Office. Nor were the different societies left without aid by him. The Sussex Archaeological Society—the labours of which he eulogised in his preface to the *Topographer and Genealogist*—and the Surrey profited by his pen, whilst to the Middlesex he contributed very valuable notes on some of the principal Companies and their members, as also on the Brasses at Harrow and other articles. The new edition of *Hutchin's Dorsetshire* has been largely added to by him; not only has his attention been directed to a correct reprint of the work, but scarcely a parish has passed without emendations and improvements. To many a young student he has given aid in directing his thoughts, and taught him how best to avail himself of the many materials—often little known and still less appreciated. That a person so willing and anxious to help, and so desirous of ascertaining and publishing the truth, should have many literary friends is not to be wondered at. Some well known have passed away; many survive, and it is sincerely to be hoped that the same spirit with which he worked will be possessed by others, and as conscientiously used. He died at Holmwood, near Dorking, on the 14th November, 1873, in the 68th year of his age. WM. DURRANT COOPER.

Art and Archaeology.

THE DUDLEY GALLERY.—THE SOCIETY OF FRENCH ARTISTS.

ONE begins already to get tired of the winter exhibition of the Dudley Gallery. The three or four best things continue to be good, but the forty or fifty second best used to be strange. One used to be able to go with a hope of finding out something of new tendencies in art which had variety at least to recommend them; besides which Mr. Solomon's and Mr. Donaldson's experiments were always interesting in themselves, and Mr. Crane's were always ingenious and occasionally delightful. All these contributors are absent, and the general impression of the exhibition as compared with the Academy is simply a sense of inferior accomplishment, which is compensated, so far as it is compensated, rather by simplicity than by novelty of intention, though it is always better that immature or mediocre artists should try to be pretty and pleasant than that they should try to be clever, and at the Academy the effort to be clever is almost inevitably all but universal.

The influence that one seems to find strongest this year is the late Mr. Mason's: perhaps the most considerable artist who has yielded to it, all the more readily because it hardly led him from his own natural direction, is Mr. P. R. Morris, whose sketch of the "Golden Hour" (168), with two children and two white calves moving through the twilight when there is a crimson mist upon the earth and a golden glow in the sky, might almost be taken for the master's own, only there is rather more solidity and less sense of everything melting away into a dank rich darkness. One finds an inspiration (not an imitation) of the "Harvest Moon" in a work of Arthur Hopkins (333), "The night cometh when no man can work": reapers with scythes are busy upon a hill-side which has an orange glow over it, though the sky above is getting pale and green, and the figures are well relieved against the sky, and those who wish to believe in the poetry of labour have a good excuse for thinking that here they have it. In (282) "Now fades the glimmering landscape from the sight," Joseph Knight, and (263) "The Morning Star," R. C. Leslie, we are reminded of Mr. Mason's poetry in grey, as the other works cited remind us of his poetry in purple and gold. The first is a moor piece, the second a sea piece. It is not an abrupt transition from the last to the work of a perfectly mature and independent artist, Mr. H. Moore's "A Nor'-wester—Coast of North Wales" (236), which is one of the most pleasing of his studies of grey sea and sky and shore, which are so curiously delicate in drawing and so deliberately opaque in colour.

Of the ordinary pre-artistic pleasantness of nature, the pleasure of feeling oneself alone and overpowered by a multitude of delightful unfamiliar sights, perhaps the best expressions are "Through-Shade to Sunshine" (47), a valley all gold and green with a stream through it, by Alfred Parsons, and (264) "Twilight on the Slaney, Clongal, County Carlow," by Cecil G. Lawson; both give an uncritical spectator the pleasure of having been there at a lucky time. Mr. W. S. Raven's "Highlands after Rain" (243) is solemn and rich, and probably all the truer to nature for being blotchy; his "Llandilo and Vale of the Towey" (25) is provoking: the rosy sunshine is pleasant, but why is half the picture to be taken up with flat moor pasture? There are a good many agreeable river pieces. "A Back-water on the Thames," by R. Macbeth (173), is one of the best.

Of serious figure pieces with some romantic intention there are fewer than usual. "Sarah and Tobias," by C. Goldie (322), is graceful and in a way religious, only they are not in earnest, their seriousness is not due to love or alarm or anxiety, but simply to a conscientious sense of decorum; if one had seen such a young couple at church one would have said, "How devout!"

Of the most important contributors, Mr. Marks sends four small and not characteristic landscapes, and one small piece, "The Convent Drudge," in his usual vein of humour. Mr. Watts' "Eve" (75) has the power and knowledge with which we are familiar, with the traces of confused endeavour from which the painter sometimes escapes. The great mother marches between a lion and an eagle with her face drawn strangely upward and backward towards golden light, in which it is a darkness, and dim purple crocuses spring up under her feet out of the gloom, in which the lion seems a golden cloud. Mr. Leslie's "Fountain" (156) is a pleasant replica of a portion of his picture at the Academy. One fancies that the graceful girl in blue and white looks rather less like an English young lady in a classical masquerade than she did in the larger picture; but it is still matter for regret that the artist found his eighteenth century maidens in golden afternoons too narrow a field to cultivate longer. Mr. Whistler's "Variations in Pink and Grey" (193) is very perfect within the arbitrary conditions; a Philistine can no longer take offence at the appearance of smudginess, and probably perspective is not to be had without solidity, to which the artist conscientiously objects: it must be admitted that his work upon his own terms does more to harmonise with the decoration of a modern house than almost any other. Mr. Wallis sends one of his pieces of dull Venetian splendour (355), and Mr. Legros reduces the Casa d'Oro into a theme for rich subdued colour which enforces a sense that Venice lately has been a very shabby town (135): he sends also a "French Girls' School" (379), where for a wonder the presiding sister is withdrawn out of the uncompromising daylight which the artist generally chooses to pour upon his French peasants, and which is shed in this picture on the class.

M. Tadéma sends "Two Children," who look archaic, but strangely pleasant, and as usual very solid. Mr. Rivière sends "Three Children on a Carthorse" and a very pretty "Dog with an Orange" (76). Mr. Hywood Hardy sends a "Stricken Lioness" (66) that is pathetic in the obvious way, and drawn and painted well enough. Miss Steele's "Starlings" (116) are odd and amusing, partly because we are not used to seeing chimney-pots close; and Mr. P. Macquoid (349) has a delightful "Spaniel running after a butterfly," which a bird is chasing too. F. Dalou has a pleasant terracotta statuette of a girl with a book twisting about on a sofa; the committee call it "A Lecture." There is no danger of a visitor missing the portrait of himself by Melchior Anderegge, the Swiss guide, nor G. Manet's portrait (15) of Le Bon Kock.

Though the last would be a loss, it is hardly as striking as the cheerful brutal literalness of "Visitors to Boulogne" (77), by the same artist, at the French Gallery in Bond-street, where the lady in blue and her little girl are represented with the knowledge of a really able painter as they might appear to any child of the little girl's acquaintance. This is pleasanter on the whole than Fantin's "La Liseuse," where the dull refinement of execution corresponds to the flabby ladylike patience of the model and the weariful accomplishment of the *Revue des deux Mondes* she is reading. There are a good many flower pieces by the same artist: and one large piece of still life, "Un coin de table" (83), that is really quaint and pretty. The great Delacroix (an entombment) this year is not so large or so crowded or so metallic, or to say all, so operatic as the "Death of Sardanapalus"; but one feels still that this artists' power is as much literary as pictorial: at least he paints too much as if it were his only business to give literary men emotions: the kneeling St. John is richly coloured; the Mother is too realistically treated to be so young. H. Lévy obtrudes upon visitors four heroic and perhaps accomplished pictures of the four seasons, which are at worst tiresome, and a "Christ in the Tomb between two Angels," presumably of Death and Resurrection, which serious people will find offensive, and a small picture (34) of an Arab horseman pursued, a sort of cross between Gilbert and Gérôme. Ribot's "Girls Reading" (1) recalls Millais' "Autumn Leaves" in feeling and the old Spanish masters in execution; his "Nature Morte" (26) is a masterly portrait of the last flare of a dying candle. There is some humour in Momzie's "Two Gardeners" (70) and Duez' "Breakfast in the Studio" (9), where an artist in comfortable brown velvet is offering wine to a model in a fearful and wonderful bonnet—fashionable when?—and "Sculpture at the Salon" (43) by the same artist, has a curious effect, as if the marble busts were masks of the visitors. Bellenger's "Ben Abdallah" (59) is a fine and solid portrait of a Moorish mulatto. C. Landelle's "Young Marguerite," though too self-conscious, is a pleasant change after the Oriental model we have been used to associate with the name.

Even in England we are familiar with Corot and the moist airy truth of tone to which he sacrifices almost every other truth of sight (especially truth of texture), to say nothing of all truths of knowledge; "A Pastoral" (66) is a more imposing example of the poetry of impression to be had on these terms than is often sent to England. Neither "Rousseau's Farm on the Banks of the Oise" (45), nor Diaz' "Opening in the Forest of Fontainebleau" (65), nor Daubigny's "Windmills at Dordrecht" and "Washing on the Oise" (21, 33), can be charged with suppression of knowledge; perhaps the bright, solid detail of Rousseau's willows may be said to be delightful, and the solemnity of Diaz is certainly impressive; so is the sunset in Daubigny's smaller picture; but after all they are like the "Windmills at Dordrecht," masterly rather than sympathetic. Ordinary French work is rather artistic in intention than literal or literary: it does not show what an ordinary person or cultivated person sees or wishes to see, but what it takes the trained eye of the artist to discern, the trained hand of the artist to execute. This makes comparatively naive work like Madame Casin's "Sketches near St. Leonard's" (107, 19) fresher and more interesting, but it exposes us to powerful work like Courbet's "Sands near Honfleur" and Fromentin's "Sahara," that are simply tiresome, and makes even such a poetical painter as Millet oppress us with a picture like "November" (118), nothing in the world but a brown terraced hill-side with birds taking wing.

Of lighter work we may notice "The Last Valley at Newport"

(18) by Laffarge, which is a striking portrait of a striking scene, and "Golden Hill," by W. J. Hennesey (119), very bright and true in detail, though it is hung so high as to confuse the perspective; as well as an early work of Whistler's (110), "The Yacht Race," with the sky carried further than he carries it now. "A Factory" (111), C. Mornet, raises the question whether something of Mr. Whistler's charm may not be had without effacing every outline. "An Arab Fair," by V. Huguet (97), and "Paying the Tithes," by J. Garnier (76), have a good deal of the gaiety of Frith's and some of Maclise's work, with signs of a more thorough artistic training.

G. A. SIMCOX.

A SUPPOSED RAPHAEL.

MR. W. KING LUCAS, of No. 11 John-street, Bedford-row, is in possession of a well-sized Italian picture which some persons are minded to attribute to the hand of Raphael. The picture is termed "The Three Graces," but ought perhaps rather to be called "The Three Goddesses"—Juno, Pallas, and Venus—as one of the figures, the one which from the type of facial beauty would most naturally be regarded as Venus, holds an apple in her hand. Two River-gods, represented under the form of statues, are also present, couched in the two corners of the picture, and forming a very leading specialty in its treatment. It may be questioned whether any explanation of these River-gods could be offered, on the assumption that the picture represents the Graces; while, if we suppose it to stand for the three Goddesses, competitors for the prize of beauty on Mount Ida, we may readily infer that the River-gods indicate the Scamander and Simois. Not that it could be regarded as in any way a *dramatic* presentment of such a subject, for there is no sort of symptom of rivalry or contention on the part of the three beauties; but, as a simply ideal or abstract treatment, it might be accepted with no great reluctance or misgiving. Using this supposition as at any rate more convenient for the purposes of identification and description, we find Pallas as the central figure, with golden elaborately-braided hair, and a cast of countenance of rather marked individuality; her back is turned to the spectator, or rather partially turned, the whole sway and poise of the figure being very elegant and informed with life. Juno stands to the spectator's left, and Venus to his right. The pose of the head in the Juno is very like, and might well have been copied from, that of the famous Galatea by Raphael, though the expression differs: this head is rather vapid both in contour and in execution. The Venus is of a very regular order of loveliness, the features delicately chiselled and refined, without much that can be called the *beau idéal*—rather a conformity to an eclectic standard of beauty derived from works of art. The figures are naked, save for some slight indications of gauzy drapery, which may perhaps be later and meaningless additions for propriety's sake. Whether with or without these impossible twirls of undefined vapour, the spirit of the picture is entirely pure; and the treatment of the landscape background—with pale grey sky, light clear tints of verdure, and a single tree forming the apex of the composition—concurs in producing a like impression. With purity, a high degree of beauty is combined; dependent not so much on the faces, or on any particular point in the individual figures, as on the grace of grouping, suavity of conception and design, and well-balanced union of living repose and lithe mobility in the figures.

As to the attribution of the picture to Raphael, we cannot say that we see any distinct internal evidence favouring such a surmise. Some portions—more especially of the foreground with the River-gods—might well have come from the hand of some pupil of Raphael's; but on the whole this supposition also (which has been suggested elsewhere) does not appear to us well sustained. In certain respects the style of the work reminds us more of Primaticcio, or some other of the Italian painters who worked in France for Francis I. But we must for the present be content to say that the author of this picture is uncertain; only, whoever he was, he had a fine sense of beauty and of the abstract in style, and a full capacity for giving expression to these in his work. The latter "is said to have been discovered accidentally in some obscure part of the metropolis, and was overlaid with the dirt and varnish of years," now cleared away.

W. M. ROSSETTI.

THE WAGNER SOCIETY.

It will be in the recollection of many of our readers that this society was founded last year, with the object of bringing before the public the works not merely of Wagner, but also of Berlioz, Liszt, and other composers of the modern school of musical thought. Three concerts were given last season, at which only a part of the intended plan of the society was carried into execution, inasmuch as the programmes consisted entirely of selections from the works of Richard Wagner. Encouraged, doubtless, by the success of the first venture, and the warm reception accorded to music most of which must have been new to the larger portion of the audiences, the society has for the present season announced a series of six concerts; and the first of these took place on the 14th of November last in St. James's Hall.

Seldom has a programme more attractive in its novelty been offered to the public than that of this concert; and the interest excited was evinced by the large number of musicians of note who were present on the occasion. An excellent orchestra of some eighty performers was marshalled under the bâton of Mr. E. Dannreuther, the conductor of the society. Within certain limitations it may be said that a conductor, like a poet, is born not made; and though practice and experience are doubtless necessary to secure perfection in this, as in other departments of musical art, far more of a conductor's success depends on natural temperament and a quasi-magnetic power of imparting his own feeling of the music to the performers whom he directs than on any amount of facility resulting merely from practice. That Mr. Dannreuther possesses no ordinary qualifications for his task was shown by the admirable way in which, under his guidance, the mostly unfamiliar and difficult music was rendered by his orchestra.

The overture to Spontini's opera *Olympia*, with which the performance commenced, is a characteristic and pleasing specimen of the style of a composer once strangely overrated, now hardly less unduly depreciated. Readers of Berlioz's entertaining "Les Soirées de l'Orchestre" will remember the enthusiastic tone in which *La Vestale* and *Fernand Cortez* are eulogized. The account of the former work, especially, inspires the wish to hear it well rendered. Of this, however, in the present state of opera in this country, there seems unfortunately but little prospect. *Olympia* was first produced in Paris in 1819 with a comparative want of success, which Berlioz attributes to political allusions in the *libretto*. Its reception in Berlin, however, where it was brought out in 1821, was far more favourable, and it is still to be occasionally heard in Germany. The overture, though it can hardly be credited with genius, in the highest acceptance of the term, is a very vigorous and pleasing piece, most brilliantly scored for the orchestra. The episode in C major which follows the second subject is, both in melody and instrumentation, strongly reminiscent of Cherubini; and the animated *coda* is interesting as a foreshadowing of the now well-worn Rossinian *crescendo*.

Great interest attached to the piece which followed—a MS. Pianoforte Concerto, by Joachim Raff, composed for Dr. Hans von Bülow, and played by him on this occasion for the first time. Though a most voluminous composer—the present work being numbered Op. 185—but little of Raff's music has as yet made its way into this country. The Concerto played by Dr. Bülow will doubtless excite the wish to hear more of the works of one of the leading German musicians of the present day. It is written in the orthodox form, so far as relates to the customary division into three movements; but these movements are all notable for a much larger proportion of episodical matter than is customary in the works of earlier masters. This predominance of episode is a distinguishing feature of the new German school; and most of Raff's larger compositions furnish striking instances of it. Whether this adds to or impairs the value of the whole work is a point on which musicians will differ; it certainly labours under the disadvantage of protracting the length of the music to what many will feel to be an undue extent. Space will not allow a detailed analysis of the Concerto; it must suffice to say that it is distinguished by nobility of thought, great originality of idea, an exquisitely tender flow of melody in the slow movement, and wonderful vigour and animation in the *finale*. The solo part, which is exceedingly brilliant, and of no small difficulty, was played by Dr. Bülow

with a perfection of finish and an alternation of fire and delicacy which were simply unsurpassable; and in spite of its great length, the Concerto rivetted the attention of the audience to its last note, and was received with the greatest enthusiasm.

To Raff's Concerto succeeded a selection from the *Meistersinger* of Wagner—the only specimen of that composer's music given at this concert. The portion chosen consisted of the "Meeting of the Mastersingers," from Act 1, and the instrumental prelude to Act 3. The latter had been performed at the society's concerts last season; the former was given for the first time. Many even of Wagner's warmest admirers will agree that the choice of the new piece was an unfortunate one. Probably no music ever written loses so much when detached from the stage as the greater portion of Wagner's. The movement in question is most effective in its place in the opera. It consists mostly of a simple and melodious phrase, accompanying the entry of the first of the mastersingers, and repeated in different keys and with different tone-colouring as each successive member of the guild makes his appearance. In the theatre the significance of the musical treatment would be intelligible at once; but in the concert-room many of the audience must have been sorely puzzled to know what it all meant, and as the first subject recurred time after time, inclined to cry with Falstaff, "Thou hast a most damnable iteration, Hal!"

The second selection—the Introduction to the 3rd Act of the same opera—is one of the few pieces by its composer which, as abstract music, will bear transplantation from its original soil without serious injury. The audience were informed in the book of words that the act opens on a quiet and bright Sunday morning; and surely nothing in music could more aptly paint the tranquil repose of a quaint old town like Nuremberg in the early sunlight than the masterly tone-picture which Wagner has presented to us. As the delineator of a particular mental condition—what the Germans call a "Stimmung"—he has never been surpassed, and the present is one of his happiest inspirations. The instrumentation, especially in the use of the four horns, is most masterly; and the effect upon the audience was evident from the tumultuous applause which followed, and which could only be allayed by the repetition of the movement.

The first part of the concert was brought to a close by Berlioz's overture to *King Lear*. This work, which has been seldom, if ever, previously performed in London, was written about 1830, during its composer's stay in Italy as prize-medallist of the Paris Conservatoire; and it must have been a strange and very pleasing surprise to those who heard it on this occasion. Berlioz is so generally considered the *ne plus ultra* of wildness and incoherence, that it might naturally have been anticipated that with such a subject he would have presented us with a piece of music full of sound and fury signifying nothing. On the contrary, the overture to *King Lear* is remarkably clear in form, and full of weirdly attractive melody, the second subject of the *allegro* being one of those haunting phrases the impression of which dwells in the memory long after the actual notes are forgotten. The instrumentation is gorgeous—rich and sonorous, but never degenerating into mere noise. The execution of the work, which is of no slight difficulty, was absolutely perfect. It is to be hoped that a second opportunity will be afforded to musicians of hearing this most interesting overture.

Great as Dr. Bülow is as a pianist in every point of view, he is nowhere greater than in his interpretation of Liszt's music; and the excitement caused by his performance at the commencement of the second part of the concert of that author's "Fantasia on Hungarian National Airs," with orchestral accompaniment, was such as is not often seen in a concert-room. Three or four peculiarly piquant Hungarian melodies are worked by Liszt into a fantasia, the solo part of which perfectly bristles with the most enormous difficulties; and the way in which these were overcome by the player, without the slightest appearance of effort, was something absolutely marvellous. The work itself is a most charming composition, though one which, from the demands it makes upon the soloist, is not likely to be often heard in public. Dr. Bülow's prodigious memory was shown by his performing both the Fantasia and Raff's intricate and elaborate Concerto without a book.

A very well-considered and careful rendering of Beethoven's great Symphony in C minor, a work so well known that any

comment is superfluous, brought this most interesting concert to a successful close.

One word in conclusion should be added in praise of the excellent arrangement carried out at this concert, of closing the doors during the performance of each piece, and only allowing ingress and egress during the intervals. The advantages of the plan are so obvious that it is to be wished it were universally adopted.

Ebenezer Prout.

"RICHELIEU" AT THE LYCEUM.

IT is late in the day to talk of the faults and merits of Lord Lytton's *Richelieu*, but not of the merits of its performance at the Lyceum Theatre, where Mr. Irving—the most prominent of recent figures upon the English stage—has essayed to make his own the character written for Macready and inherited by Mr. Phelps. Genuine interest has been taken and will continue to be taken in this performance of Mr. Irving's at the Lyceum: a theatre to which people do not go so much with the questions, "Is the play good? What of the *mise-en-scène*?"—for that is almost known beforehand and settled to begin with—as with the inquiry how Mr. Irving has again acquitted himself: whether he may now be permanently classed in the rank of great actors, or whether he is still on his probation, doing informally that which new comers at the Théâtre Français have always to do *formally*: that is, seeking through many parts a confirmation of the favourable verdict pronounced at first on one. People do not go to the Lyceum for the sake of the scenery and appointments, I have said; but let me add in a parenthesis, before discussing Mr. Irving in his new part, that it would not be particularly discreditable to them did they indeed do so—if Mr. Irving were out of the way. For at the Lyceum these things are better managed than at any other London playhouse. They are not thrust into prominence—a display of barbaric splendour and lavishness—but they take their proper place, always cared for and long thought about, and they make a harmonious and well-studied background to a performance which always endeavours to please the artistic mind and eye. What can possibly be better in their kind than the costumes in *Richelieu*?—those harmonies of pale grey and pale green and of rich browns. The colours do not dazzle—they *satisfy*. Again what is better than the whole setting of Richelieu's working-chamber, with its Renaissance fireplace and Renaissance cabinets? And these things are not forced upon one's attention: they do not do duty for good acting. There is this indeed, from beginning to end; or at all events a serious effort to attain it.

And yet, if one comes to analyse, if one descends to detail—as all serviceable criticism should, even at the risk of being pronounced dogmatic—there is a good deal to which one must take exception. The secondary characters, played for the most part with spirit, energy, and endeavour, do not receive from their performers that minute and delicate attention which as a matter of course such characters receive at the Comédie Française, and which as a matter of fact they have received hardly less at the Gymnase, thanks to the art-feeling which M. Montigny has infused into the company there. As a consequence, these secondary characters are played best in their strongest moments, when feeling carries all before it, and worst in the quiet times of waiting or trifling talk—times always the truest test of how far acting is artistic. Mr. John Clayton, who did so well as Joseph Surface at the Vaudeville, could not make *much* more, but might possibly make a *little* more out of the part of that fat *fainéant*, Louis Treize. He is least satisfactory in the first of his scenes, where he does not show one a trace of the "divinity" which doth somehow "hedge a king," even if he be a stupid one—it hedged all our later Georges, and that is saying a good deal for it. But of course it is a nice question how far a monarch who knows painfully that all his strength is outside of himself, will yet conceal the knowledge, unconsciously or consciously—whether *being* powerless, he will invariably *look* so. No one with Mr. Clayton's air of weak acquiescence and weaker protestation could keep a crown for six months now-a-days. But even those who are at issue with the actor as to the reasonableness of the first part of his performance, will admit that he could hardly be better at the end. The final scene, in which, having disgraced Richelieu, Louis is overwhelmed by the receipt of despatches the import of

which he cannot understand—by an access of business he is wholly incompetent to deal with—is full of good touches; Mr. Clayton showing here not only the King's weakness, but the vexatiousness of it, and expressing in the "I'll reflect upon it" not only the feeble monarch's recourse to delay, but likewise the utter hopelessness of the delay. The representatives of De Mauprat and Baradas are best in their noisiest and most earnest moments; and herein they differ greatly from Miss Isabel Bateman, who is really powerful only when she does not in the least suspect it. Her part—Julie de Mortemar—is more difficult than effective; and though the sympathies of the audience would surely go with her, she has not many profitable opportunities of calling for their manifestation. Miss Bateman's defiance is more disagreeable than vigorous. In exciting moments the movements of her face are excessive; and she has lost something—though certainly she has gained more—by her aptitude for learning in Mr. Irving's new school of intense and strenuous acting. With her natural gifts it is wholly unnecessary that she should ever fail to be graceful. Is it not equally unnecessary that directly she becomes excited, her accent—perfectly pleasant and pure beforehand—should be such as to jar upon an English ear? There are actresses whose faults no one can mend, and who without them would be

"icily regular, splendidly null."

One leaves such actresses alone, for good or ill. But to Miss Isabel Bateman, with her clear intelligence and her undoubted command of gentle pathos and grace, one owes it not only to speak, but to speak plainly. And now before I pass to Mr. Irving, whose work all London notices, let me record a word of quite unqualified praise of a young and comparatively little known actor, Mr. H. B. Conway, who invests the part of François, the messenger who recovers the lost despatch, with every quality that can give to a short part a strong interest and absolute reality.

I fear it is the tendency of Mr. Henry Irving to be a little spoilt by the indiscriminating applause of the groundlings, who are far better judges whether a passion is violent than whether it is natural and appropriate. He shows no tendency whatever to allow himself to be spoilt in the vulgar way. With him nothing is slurred, nothing is careless. He is as completely absorbed in his part, and is as completely devoted to it, on the hundredth night of the performance as upon the first. And to the conception and representation of each new character he brings original thought, infinite pains, and an experience enriched by keen observation. But he is perhaps inclined to pitch his performance in too high a key, or to break into a high key when there is no reason for it. In a word, there is a tendency to exaggeration. Here and there the strong points which might make him remembered by good judges as a great actor of high passion are ruined simply because they are overdone. Seemingly he is pursued by an insatiable desire—fanned perhaps into a flame by the enthusiasm of the spectators. I commend to him a story of a great French actor of an earlier generation than ours, who, being complimented one night on the vehemence of his passion, the vigour of his performance, said quietly and regretfully, "No, I did not act well to-night. You are quite in error about it—I was no longer master of myself." And either Mr. Irving could often say this truthfully of his own performance or else—and this is worse—he, being master of himself, has deliberately pitched the key too high. No one should object to the horror of *The Bells*: the circumstances there required it. No one has anything but praise for the pathos of *Charles the First* and the subtle rascality of the *Two Roses*. But in *Eugene Aram*, Mr. Irving dies all over the stage—a cat has nine lives, and Eugene Aram nine deaths—his final release cannot possibly be a greater comfort to him than it is to ourselves—and in *Richelieu* the outbreak of his rage is excessive: it is more likely to have been studied in madhouse cells than in the cabinets of statesmen. But fortunately for Mr. Irving and for the playgoing public, there are two circumstances which do mark him out as a unique and illustrious artist. First there are the many moments when the high passion does not go wrong; and secondly there are the longer and of course more numerous periods when vehemence and excitement being out of the question, there is room for the uninterrupted display of sagacious judgment and serious and thoughtful art. Of the really fine

displays of passion and unbridled eagerness, the best in *Richelieu* are those called forth by the misadventure of the despatch. The master's excited appeal to François, the messenger—an appeal that is half a threat and half a wiser and more genial encouragement—is worth an effort to witness. The touches of quiet art elsewhere are very numerous and very admirable. The suppressed cough of a worn-out old man, the physical feebleness, the mental activity and energy which exact from this weak body the utmost jot of its service, the unwilling recognition of a creeping decay, the sigh for an hour of youth—all these are represented with a power of suggestion which creates as well as interprets. A hundred touches go to make up the picture of this Richelieu, and I ask the spectator to notice particularly one subtle moment of gesture and expression, when the Cardinal, having forgiven De Mauprat and granted him the hand of Julie, cannot listen to his thanks. That moment is of exquisite truth, for it reveals the semi-cynical good-nature of an old man high in power, for whom the raptures of the young are dead or trifling things—the semi-cynical good-nature of one to whom a stray act of forgiveness seems as slight and whimsical an incident as the flinging of a chance bone to a hungry dog. There is no touch of human sympathy—but a moment of wanton good-humour—and then the all-important work for France is resumed and found absorbing. Personal pleasure, personal good-will!—there is no room for these in Richelieu's life, when he is busied with a thousand affairs. It is by touches of character like this that an actor earns that title to greatness which, with all his failings, cannot, I think, be justly denied to Mr. Irving.

FREDERICK WEDMORE.

NOTES ON ART.

A volume of fine etchings lately published in Paris, accompanied by a "Study" of the artist by Alfred Sensier, has revealed an almost unknown master to the general public. This master is Georges Michel, a French painter but little appreciated in his lifetime, but on whom connoisseurs now bestow the title of "the French Ruysdaël." Georges Michel died about thirty years ago, after having executed a vast amount of work. "It is by thousands," says his exponent, "that his harsh landscapes, his angry skies, his twisted trees, and his extensive plains may be reckoned." Nothing it appears was too mean for this lover of nature to reproduce. Not only, like Reynolds, could he find light and shade in a cocked hat, but he even studied its effects in sewage outfalls. He loved his Paris and his Montmartre so much, says his widow, "qu'il allait jusqu'à peindre les dépotoirs de Pantin." Once when returning from this odorous employment, "Tiens," he remarked, "c'est comme un torrent de Suisse, et c'est même d'un bien plus beau ton, c'est doré comme un Cuyt."

Such a realist as this, unrepelled by the most unfavourable aspects of nature, choosing indeed to paint her in her gloomiest and most discordant moods, would doubtless find thousands of subjects for his art. He seems indeed to think it no part of his work as an artist to select and idealize, but sets himself to paint things

"Just as they are, careless what comes of it.
God's works—paint any one, and count it crime
To let a truth slip."

M. Alfred Sensier has done good service to art by reviving the remembrance of this hitherto neglected artist, but whether the praise of connoisseurs and the demand this praise has at last created for his work will be lasting it is difficult to say. It is possible that Georges Michel is now as much overrated as he was underrated in his lifetime.

A third edition of *William Hogarth's Zeichnungen*, with critical explanations by G. C. Lichtenberg and a biography by Dr. Franz Rottenkamp, has just been published in Germany. German critics have always shown a high and fine appreciation of our great national artist, whose pictures, as the prospectus to the above work truly remarks, belong not only to the "history of art, but also to the history of culture."

We learn that a German translation by Professor Springer of Messrs Crowe and Cavalcaselle's *Early Flemish Painters* will appear next spring. Mr. Murray is about to issue Mr.

Crowe's edition, in great part re-written, of Waagen's *Kugler's Handbook to Art*.

M. Emile Chatrousse, a distinguished sculptor, writes to the *Chronique* to complain of an amusing piece of prudery on the part of a French abbé.

M. Chatrousse had contributed to a horticultural fête at Pontoise a statuette of a child three years old holding up some grapes in its little shirt. This statuette, which was called "La petite Vendangeuse," attracted much admiration on the first day of the show, but on the second it was found to be missing, and no one could tell where it had gone. The matter was at last put into the hands of the police, who some days after discovered it under a heap of rubbish. Only then did M. l'abbé, the curé-doyen of Pontoise, come forward and state in the local paper that he "alone, in the night, and without accomplice, had torn down the indecent figure from its pedestal and had thus spared the town six days of scandal." The indignant artist speaks of his work as "une inspiration de père de famille." No doubt it was this source of "inspiration" that drew down upon the pretty little statue the wrath of the virtuous and celibate iconoclast. He had unfortunately no nursery reminiscences to soften his heart towards the "indecent" of undressed baby. Truly this "vengeur de la décence publique," as he calls himself, may rank with the inquisitors of the sixteenth century in Spain, who considered it immoral to represent the Infant Saviour unclothed, and warned artists against painting even the naked feet of the Virgin.

The honours of M. Alma Tadéma accumulate. This able painter has just received the *Croix de la Légion d'Honneur* for his picture of the "Vintage," exhibited along with the "Mummy" in the last Salon. This distinction is the more gratifying because of the law passed last year limiting the number of Crosses allowed in one season to foreign artists, to a single one. Last January the Queen distinguished Alma-Tadéma by granting him at once Letters of Denization, although the legal term of five years' residence had not been accomplished.

Besides M. Alma Tadéma, MM. Robert-Fleury, de Neuville, Heuner, and Detaille, painters, and MM. Schoenewerk and Hiolle, sculptors, have been named Chevaliers of the Legion of Honour.

The Mayor of Liverpool, Mr. A. B. Walker, has undertaken to provide an Art Museum in that town at his own expense. The designs for the new building are being prepared by Cornelius Sherlock and Henry H. Vale, architects in Liverpool, and it is estimated that it will cost twenty thousand pounds.

The *Zeitschrift für bildende Kunst* contains two etchings this month from pictures of Rembrandt's early time, before he became the great "King of Shadows." One of these, "St. Paul in Prison," is the first dated picture that we have by him. It was painted in 1627, and is at present in the Royal Museum at Stuttgart. The other, a "Repose in Egypt," etched by Léopold Flameng, is more like what we know of Rembrandt's style; still, if the etcher has represented it faithfully, the painting must lack the power of the master's later time. Rembrandt's first wife, Saskia, evidently inspired the painter with his conception of the Virgin, for we have here the same pleasant face as in the well-known portrait of that lady seated on her husband's knee. A short article by Dr. Woltman accompanies and elucidates the two etchings.

The mysterious disappearance of the well-known bronze statue of Napoleon I. commonly called "Le petit corporal," which our readers will remember as formerly standing on the top of the Colonne Vendôme, but which within the last few years has been removed and placed at the *ronde-point de Courbevoie*, has caused much speculation and talk in Paris. It was asserted in some of the journals that the Communists had thrown it into the Seine, where it still remained; others reported that it had been fished out of the water and had not suffered the least damage; while the inhabitants of Courbevoie assured inquirers that the statue had been decapitated by the Communists, but that its head had been piously preserved by the Mayor as a relic.

None of these statements however seem to be correct, at least a more satisfactory explanation is now offered of the mystery. The *Moniteur des Arts* informs us that the statue was, it is true, thrown into the Seine in the night of the 20th September, 1871, not by the Communists, but by order of M. Cresson, préfet of police, in order to preserve it from injury. When the disturbances in Paris were over it was taken out of the water and removed to the dépôt for the government marbles in the rue de l'Université, where it still remains, in company with the statue of Louis XVI. and those of many other dethroned rulers who lie there waiting for the restoration of their dynasties, when they hope once more to be hoisted to their pedestals. "Le petit Corporal" has unfortunately had its head broken off in its vicissitudes, but in such manner that it can easily be restored. This statue, which is dear to all Frenchmen, was the work of M. Seurre, and has great artistic merit. It is thought probable that it will again be placed on the top of the restored Colonne Vendôme, the figure of the first Emperor in Roman costume, which has more recently stood there, having been utterly destroyed.

The last number of the *Archæological Journal* contains an interesting article on "The Architecture of the Eleventh Century," by Mr. J. H. Parker, in which he maintains his previously expressed conviction that the churches of the Anglo-Saxon period in England were with few exceptions built of wood, and that it was only in the eleventh century that stone came fairly into use for building purposes. "For many years past," he writes, "I have been hunting for buildings of the tenth century with very little success. It is a matter of history that some stone buildings were erected at that time, but there is very little construction of that period remaining in any of them."

"Les Adieux," by M. C. Tissot. This picture of lovers parting, which some of our readers may remember, has been admirably engraved by Bellin. The print is on a considerable scale, so as really to carry out the full impression of the painter, and has besides a certain charm in the execution of the engraving which deserves particular mention. For some time on the continent elaborate etching for small subjects has taken the place to some extent of engraving proper, that is to say of work by means of the *burin*. With us this has been the case in large subjects with the addition of mezzotint, but the small etchings we speak of have been toned by a process of another kind, recognisable for the first time on a large scale on this print by Bellin after Tissot, published by Messrs. Pilgeram and Lefèvre. With regard to the subject of "The Adieux," the time is at the end of last century, the lover we may suppose a Girondist going to his fate in Paris, and the girl he parts with, she within and he without the gate of her father's domain, has no power to keep him. It is a little episode in a great drama singularly well told.

The sixteenth part of the *Allgemeines Künstler-Lexikon* has just reached us. This wonderful republication, which is in fact a new work, is edited by Dr. T. Meyer, and was commenced in 1870. The present part only comes down to "Auden—Aerd"; nearly three years for one letter of the alphabet! It will doubtless be useful to our children or grandchildren.

New Publications.

- BARET, E. De l'*Amadis de Gaule* et de son influence sur les mœurs et la littérature au xvi^e et au xvii^e siècle, avec une notice bibliographique. Paris: Firmin Didot.
- BENEDIX, R. Die Shakespearomanie. Zur Abwehr. Stuttgart: Cotta.
- BERNOLLI, J. J. Aphrodite. Ein Baustein zur griechischen Kunst-mythologie. Leipzig: Engelmann.
- BLACK, W. A Princess of Thule. Macmillan.
- CAHIER, C. Nouveaux Mélanges d'archéologie, d'histoire et de littérature sur le moyen âge. Paris: Firmin Didot.
- DERERICH, H. Uhland als episch-lyrischer Dichter besonders im Vergleich zu Schiller. Paderborn: Schöningh.
- FOERSTER, R. Der Raub und die Rückkehr der Persephone, in mythologischer, literatur- und kunstgeschichtlicher Hinsicht untersucht. Breslau: Max.
- GRUEBER, B. Die Kunst des Mittelalters in Böhmen. 6. Lfg. Wien: Gerold's Sohn.

- HELLWALD, F. V. *Geschichte des holländischen Theaters*. Rotterdam: van Baalen.
- LANDSEER, Sir E. *Pictures with Descriptions and Biographical Sketch*. Virtue.
- LENNOX, Lord W. P. *My Recollections from 1806 to 1873*. Hurst and Blackett.
- MACLISE, D. *A Gallery of illustrious literary characters (1830-1838)*, drawn by the late Daniel Maclise, R.A., and accompanied by Notices, chiefly by William Maginn, LL.D. Edited by William Bates, B.A. Chatto and Windus.
- PAGÈS, A. *Les grands poètes français. Portraits authentiques, autographes, fac-simile des éditions originales, notices et extraits*. Paris: Lib. de l'Echo de la Sorbonne.
- PAPANTI, G. *Dante secondo la tradizione e i novellatori*. Livorno.
- PUYMAIGRE, le Comte de. *La Cour littéraire de Don Juan II., Roi de Castille*. Paris: Franck.
- ROSCHER, W. H. *Studien zur vergleichenden Mythologie der Griechen und Römer. I. Apollon und Mars*. Leipzig: Engelmann.
- SCHMIDT, W. *Das Leben des Malers Adrian Brouwer*. Leipzig: Engelmann.
- VAN DER KELLEN, J. P. *Le Peintre-Graveur hollandais et flamand, ou, Catalogue raisonné des estampes gravées par les peintres de l'école hollandaise et flamande. (Ouvrage faisant suite au Peintre-graveur de Bartsch)*. Utrecht: Kemink & Zoon.
- WALLER, S. E. *Six Weeks in the saddle: a Painter's Journal in Iceland*. Macmillan.
- WILMOWSKY, v. *Archäologische Funde in Trier und Umgegend*. Trier: Lintz.

Theology.

A History of the Catholic Church of Jesus Christ from the death of Saint John to the middle of the second century. By Thomas Wimberley Mossman, B.A., Rector of Torrington, Lincolnshire. London: Longmans.

THIS work is scarcely a history in the ordinary sense of the word. It is rather a series of essays, sometimes discursive enough, but always animated and interesting, on the history and literature of the post-Apostolic Church. Hence there is a want of proportion between the parts, which cannot fail to strike the most hasty reader, and while the legend of a saint is detailed in many pages, the authenticity of a gospel is settled in a few lines. Mr. Mossman does not, perhaps, pretend to write with the impassive calm of the purely philosophical historian. He is an intense believer in Christianity, of which he regards the incarnation of God in Christ as the essence, but within that limit, and indeed, it is fair to add, some way beyond it, he is broad-minded and charitable; while his tenderness to the so-called heretics, whose views in reality sometimes represented the teachings of the founders of Christianity more accurately than those of the majority who claimed to be the Catholic Church, contrasts favourably with the spirit in which ecclesiastical history has too often been written. Of the writings of the early Fathers his knowledge is extensive and minute, and as he has evidently studied them with care, and endeavoured to arrive at their meaning without regard to pre-conceived ideas, his conclusions are always deserving of consideration. If he is equally well read in the critical literature of Germany, it is not evident from these pages.

The most interesting part of this work is that which deals with the two greatest heresies of the early Church, that of the Ebionites and Montanism. Mr. Mossman avows his conviction that there are only two sects at present existing which the primitive Church would not have received into her bosom, namely the Unitarians and the Society of Friends, and it is with much hesitation that he excludes even these. In fact, when he comes to deal with the Ebionites, he finds himself compelled to admit that there was a large body of persons living at Jerusalem in immediate connection with the Apostles who had no belief in the Deity of the Saviour, and this accordingly suggests the question "whether, or not, a pro-

fession of belief in the true and eternal Divinity of Christ was necessary for admission into the Apostolic Church of Jerusalem?" And here is his answer to his own question; "Not only was this belief apparently not required, as of necessity; but if we will throw off all prejudgments and prepossessions, and read the opening chapters of the Acts of the Apostles, and especially St. Peter's speeches, as we would any other writings, we can come to no other conclusion." The explanation is, of course, that which has been usually, perhaps invariably, given by those orthodox writers who have admitted the fact, namely, that the doctrines of the Trinity and the Incarnation were intentionally kept in the background in order to facilitate the conversion of the Jews. But whether this explanation is satisfactory, or whether the Ebionites did not in fact preserve the whole doctrine of Jesus and his apostles more faithfully than the Catholic Church, is a question the answer to which must depend, for the critic at least, on the view taken of the authenticity of the gospels, and especially of the gospel of John. However that may be, it is not easy to see how Mr. Mossman's conclusion can be evaded. The Ebionites had clearly standing ground within the Catholic Church according to its original constitution. But when, not contented with toleration, they insisted on formulating their dogmas, and making them the standard of orthodoxy, it then, according to our author, became inevitable that they should be excluded as heretics.

Undoubtedly one of the most extraordinary and interesting phenomena connected with the history of the early Church was that great outburst of fanaticism which occurred in Phrygia, about the middle of the second century, swept through the Church from East to West, carrying away with it numbers of the most earnest minds, among the rest the learned and eloquent Tertullian, and almost succeeded in extorting a recognition from the Bishop of Rome; which to all appearance revived the apostolic gift of tongues, and claimed to be the fulfilment of Christ's promise of the advent of the Paraclete. "Montanism," says Mr. Mossman, "seems to have been at its outset, an attempt to solve the great problem of the true position of woman in the Church of the Lord Jesus Christ." Such a statement is one-sided, though it is undoubtedly true that this question rose into great prominence in connection with Montanism. Great emotional movements, whether they are traceable to natural or supernatural sources, know no distinction of sex, and the Montanists, in vindicating the right of women to the possession of the Spirit and to prophesy, were more in accordance with the practice of the primitive Church than the Catholics who denounced them; but obviously Montanism itself created the problem which it tried to solve. St. Paul had made special provision for women prophesying, insisting only that they should do so with their heads covered; but, unless 1 Cor. xiv. 34, 35 be an interpolation, as Mr. Mossman suggests, he had at the same time forbidden them to speak in the Church under ordinary circumstances. When therefore the spirit of prophecy died away, women naturally ceased to be prominent or to take any part in the public services of the Church. When the Montanist enthusiasm broke out it was impossible that it should be confined to one sex. The beautiful legend of St. Thekla, which is given here in full, has a very interesting connection with this subject. Mr. Mossman takes the indulgent view that it was written in perfect good faith by one who believed it to be true, but who was at the same time fully conscious that it favoured Montanism; and he even contends that it may have some amount of fact at its foundation. All that can be said is that it is not impossible; but when we think of the *Clementine Recognitions*, the *Shepherd* of Hermas, and other such works, and remember that about a century had elapsed since the death

of Paul before the Acts of Paul and Thekla were written, we cannot feel tempted to adopt the supposition.

Another very important question raised by Montanism was that of marriage and divorce. In forbidding more than one marriage, and refusing all opportunity of repentance to adulterers, these heretics only represented a tendency which had existed from the very beginning, and were able to allege certain passages of Scripture in support of their views. The Epistle to the Hebrews states in the strongest terms that for those who have once lapsed repentance is impossible, while Paul, besides disparaging marriage, forbids that bishops at least should marry again; and a sect influenced by a powerful enthusiasm like the Montanists would naturally adopt the most stringent practice. The continuance of this tendency until it became organised in the Phrygian heresy is evident from the *Pastor* of Hermas, which, representing the more generous Catholic view, allows one repentance to those who have committed sins of the flesh. The teaching of the *Pastor* on this point has indeed been the subject of serious difference of opinion. Some of the German critics have regarded the work as adverse to the second repentance and maintained that Tertullian had fallen into a misunderstanding when he spoke of the "Pastor of adulterers," inasmuch as the repentance was allowed only *dum aedificatur turris*, until the completion of the Church. This is quite true, but the answer surely is that the completion of the Church was to be followed by the end of the world, so that in fact repentance was allowed while the world endured. Such an explanation would certainly have failed to satisfy Tertullian, who was violently opposed to all compromise with sinners. Besides, it is difficult to see how there can be any dispute upon the main point, for Hermas expressly says, in reference to this particular question of adultery, in which he includes idolatry, that "there is one repentance to the servants of God." There are indeed some passages which scarcely harmonise with this statement, but on the whole the writing seems to be that of one cautiously urging a view which he knows will rouse strong opposition. It was the view, however, which finally prevailed, though the Montanists made a hard struggle, and might possibly have maintained their existence if they had been satisfied to be a part of the Church, instead of attempting to be the whole. Mr. Mossman's general judgment on these so-called heretics is wise and liberal. "The great error," he says, "into which the Montanists fell, if they did fall into it—for the evidence can scarcely be said to be absolutely conclusive—was that they attempted to enforce their code of discipline, and their counsels of perfection as rules binding upon the whole Church, upon the strong and the weak alike. What they ought to have done was to have formed themselves into an Order, or a Community of Christians, with their own peculiar customs and ordinances. They should have been an Ecclesia or Church within the Church. And this perhaps was what they wished to do, if they had been permitted by the ecclesiastical party: but they do not seem ever to have had the chance, any more than the Methodists were allowed to form themselves into a recognized community within the Anglican Church" (pp. 437-438).

There is one other point which may to a certain extent be regarded as the special subject of this work, and which therefore must not be altogether omitted, "the original organisation of the Christian ministry and the growth of Episcopacy." On this question I need not say much. The evidence for the equality or identity of bishops and presbyters in the early Church, is so clear, the traces of the gradual growth of episcopacy are so plainly impressed on the history of the first centuries, that it is scarcely possible that any unbiassed inquirer should conclude the original constitution

of the Church to have been episcopalian in the Roman or Anglican sense of the word. Whoever thinks the contrary may be recommended to study this work. On this point Mr. Mossman's judgment may be considered peculiarly valuable; for not only is he himself a clergyman of the Anglican Church, but he confesses to having at one time "nearly always found Anglicanism in the Fathers," and it is only since reading them "without looking for anything at all" that he has "discovered comparatively little of it, but a very great deal of what is not Anglicanism." His pages furnish abundant evidence of the original parity or identity of bishops and presbyters. But Mr. Mossman goes far beyond this. He maintains as strongly as any Nonconformist could do the spiritual independence of the Kingdom of Christ, and says, "Sooner or later, the principle will be just as universally acknowledged, as the wickedness of persecution on account of religion is now, that the favouring, or upholding, or establishing, or patronizing any one particular religious body by the State is inconsistent with a perfect belief in the rights of conscience" (p. 162).

A few general remarks may now conclude this notice. Mr. Mossman occasionally puts more implicit confidence in the statements of ecclesiastical writers than perhaps a just criticism would warrant. Thus he speaks of "the indisputable fact that Clement was consecrated bishop by St. Peter." Now it is indeed an indisputable fact that Tertullian says so, but whether Tertullian based his assertion on any adequate knowledge is fairly open to doubt. The presbyterian theory reconciles the otherwise conflicting statements of Irenæus and Tertullian, but because two statements can be reconciled it does not follow that both are true, and in this case the probability seems to be that Linus was fixed on by tradition as the first bishop of Rome simply on account of his being mentioned by Paul in the Second Epistle to Timothy. Again, Mr. Mossman, as we have seen in the case of Thekla, is too much inclined to look for facts where it is tolerably plain that we have nothing but fiction. While admitting that the Clementine *Recognitions* read like a romance he nevertheless contends that there is nothing in them "incredible or even violently improbable." He seems to be carried away by his enthusiasm for Christian antiquity when he calls the description of Nature in Clement's Epistle "a magnificent burst of the highest order of eloquence" (p. 42). It is a fine passage, but there are many finer in the heathen writers, for example the noble argument for the existence of God in Cicero's *De natura deorum*. It is certainly somewhat venturesome to call Simon Magus "a great, original, creative genius" (p. 126). Mr. Mossman does not notice the view which identifies him with the Apostle Paul. Mr. Mossman's views of inspiration are moderate and rational, but in referring to the gift of tongues he will probably be thought to have gone either too far or not far enough. He holds that "the apostles were miraculously assisted by the Holy Ghost to preach in divers languages," but does not consider it necessary to believe "that the gift of tongues ever enabled them to speak and write in Ciceronian Latin or Platonic Greek" (p. 74); to which it might be replied that if the Holy Spirit enabled them to speak Latin at all He must surely have enabled them to speak it correctly. Mr. Mossman is far too fair a writer to hide or misrepresent any fact, whether it makes for him or against him; but his statements are sometimes a little misleading. Thus he tells us that Marcion "did not deny that the Gospels of Matthew, Mark, Luke, and John were really written by the authors whose names they bore, but he impugned and rejected the authority of three of them for other reasons which he assigned" (p. 128). Now, what we know about Marcion is that he made use of a gospel which presented the appearance of a mutilated version of St. Luke, but which many modern critics have regarded, on very strong grounds of internal evidence, as an

earlier and more authentic form of our third gospel. That Marcion knew and rejected the other three gospels, in their present form and under the names which they now bear, is an inference which no doubt Mr. Mossman considers quite warrantable from the somewhat general statements of Tertullian; but Tertullian says expressly that Marcion did not affix any name to his gospel.

I should mention perhaps that this work is put forth as an Eirenicon, but I cannot pretend to share in its author's hopes that it will succeed in healing the divisions of eighteen centuries. If indeed all men would become as charitable as Mr. Mossman, and at the same time believe in the Incarnation, the thing would be done; but so it would if all men would admit the infallibility of Pius IX. The former consummation would certainly be preferable to the latter, but it may be doubted whether either is likely to be speedily attained.

ROBERT B. DRUMMOND.

The Commentary of Ibn Ezra on Isaiah: edited from MSS., and translated, with notes, introductions, and indexes. Vol. I., translation of the Commentary; Vol. II., the Anglican version of the Book of the Prophet Isaiah, amended according to the Commentary of Ibn Ezra, by M. Friedländer, Ph.D. Trübner & Co.

THE Society of Hebrew Literature have done well to give prominence to a work on such a subject by one of the most profound and original of Rabbinic commentators, Rabbi Abraham ben Ezra—briefly in Arabic Ibn Ezra—of Toledo (A.D. 1092-1167). The large class to whom the term Rabbinic suggests a futile display of misapplied subtlety will see occasion to revise their judgment after some study of the work now presented to them in a comparatively popular form. While showing but slight traces of medievalism, it suggests, as is known to readers of Cheyne's *Isaiah*, the supposed modern theory of the composite authorship of the book; and seems, moreover, to imply a doubt as to the chronology of the "Creation," at the same time maintaining that *bara* in Gen. i. 1 does not mean, to bring into existence from nonentity. The style of the original is marked by a terseness and epigrammaticism to which it is sometimes hard to do justice in a rendering; but the editor, though ignoring the word-play in such passages as i. 24, quotes a characteristic example from another work, where it is said of R. Jonah, who held that there was only one star named *k'sil*—a word also meaning *fool*—that "if there is only one *k'sil* in the heavens, there are many on earth, and he is one of them" (p. 67).

In the Introduction is an account of the author's life and works. What is said about the ways of writing his name is meagre and inconclusive. It is commonly supposed that *יבן* is simply the Arabic *Ibn*, but it should have been mentioned, if only for refutation, that some take it as an abbreviation for *A[braham]ben*. Even the abbreviation *יבן*, for Rabbi Abraham ben Ezra, is unnoticed. The editor writes *Ibn* Ezra in cases where any form *except* *Ibn* is admissible, and does not shrink from the confusion of tongues in Rabbi Abraham *Ibn* Ezra (p. xviii.), where *Ibn* is perversely written for *ben*. In what follows I adopt Dr. F.'s abbreviation, I. E.

I. E. has placed on record, in some verses, that he did not prosper in business: "Were I a shroud-seller men would not die all my days . . . were candles my merchandise the sun would not set till my death"; and yet surely he must have been a practical man, for "It is said that once when he was on board a vessel with some of his pupils, a raging storm compelled the captain to throw every ninth man of the passengers overboard; by means of an algebraical formula, which his mathematical knowledge had

discovered, he placed himself and his party in such a position that the fatal number never reached one of them; but neither the plan of the captain, nor the counterplot of Ibn Ezra is sufficiently known!" He was an observant traveller in Europe, Asia, and Africa, visiting amongst other places England, where he was well received. For some account of his works generally the reader may be referred to the Introduction. I do not know whether it might be fairly said of any of them, that "their text is exceedingly mutilated and corrupt," but as regards the commentary on Isaiah, if all the proposed emendations are to be adopted, the Society's text will be *facile princeps* in inaccuracy. The want of precision in rendering, which creates a difficulty in such passages as xvii. 14: "In the evening the men of Jerusalem were afraid of him," and lo! "before the morning he is not"; and which would commit I. E. to the preposterous statement that the sun and the moon are called "great luminaries *because* they are the cause of rain, but of course only at the will of the Almighty" (xviii. 4); makes it appear sometimes to the reader of the translation, that a trenchant emendation is required; but too many of the "emendations" of any magnitude are seen at a glance to be inaccurate. I proceed to examine a few places more or less in detail, beginning with v. 9; (xxii. 14):—

"To mine ears, *the ears of the Lord*, has come the report of the injustice which you have committed; comp. *Your prophet, the prophet of the Lord* (Numb. xii. 6)." "The *an* of the Hebrew text in this remark, as well as in that on xxii. 14, is a mutilation of *ōznē*, *the ears of*; the comparison with the instance quoted, and I. E. on Numb. xii. 6, leaves no doubt about it."

But Dr. F., from his too great addiction to "free translation," has given a rendering of what I. E. for consistency's sake *ought* to have quoted. The following is more like the actual text: "In mine ears, *I* the Lord of Hosts, is this violence that thou hast wrought. Comp. [*I*] *the Lord will make myself known unto them in a vision*"; where the sense is quite satisfactory, and the construction of *an* is as in Dan. viii. 1. The question, then, is not simply whether *ōznē* is to be written for *an* in two passages, but whether in the same two passages we are also to substitute *n'bhikem* for *dammar'ah elav dthvaddā*. I. E.'s comment on Numb. xii. 6 is, indeed, in favour of the change; but he sometimes varies his renderings, as Dr. F. admits (p. 127).

On p. 44 of Vol. II. we are startled by the rendering: "Thy voice shall be, as of *a potter*, out of the ground," etc. (xxix. 4). The comment on the passage is rendered: "As a potter. Comp. *as bottles*. The potter, because of his vocation, speaks from below"; and to remove all difficulty, it is added in a note: "The potter was mostly occupied with his work below the surface of the earth." This catastrophe seems to have resulted from the misreading of a *Daleth*. I. E.'s actual comment is as follows: "*k'obh*. Comp. Job xxxii. 19: like new bottles. *For such was their craft*"—the point of comparison being the mode of speaking of the *necromancer* or *ἐγγαστριμύθος*. Compare R. D. K. on the Witch of Endor.

An unfortunate slip is made at xvi. 14: "As the years of a hireling, who daily counts (?) when the end will come, so the prophet is satisfied when he sees that *the time of the calamity of Moab approaches*"; where the true rendering is "*the end of their calamity*"; so that we might have dispensed with the note: "Just the contrary remark is made in Rashi on xv. 5: that the prophets sympathized with other nations in their calamities." The extremely vague suggestion in note 3, p. 93, is superfluous, since the text yields a good sense as it stands. The "desert of the sea" is explained of Babylon: the Persian enemy "cometh from the desert," *but not from the sea*; which is a terse way of

warning the reader that the second *milbar* is not to be confounded with the first. A strangely illogical alteration is made on the following page. I. E. makes Belshazzar begin to speak in the middle of xxi. 2: "All the sighing thereof have I made to cease;" but Dr. F. reads as follows: "I think that the whole passage, *from the beginning of this verse* till the end of the chapter, is the speech which the prophet puts into the mouth of King Belshazzar." It is true that at the beginning of the verse I. E. writes: "A *prophecy* grievous to Babylon has been announced to me—words of the *prophet* . . ." but Dr. F., not in the least disconcerted, writes in a note: "This is not the opinion of I. E. himself, as he remarks below in this same verse; the first person refers to Belshazzar, who is here represented as speaking." Thus a plain statement of the author cannot express his meaning, because it does not agree with a conjectural emendation of the editor. The further proposal to read: "they [for *he*] drank," proceeds upon a misconception. Comp. ver. 4: "The night of *my* pleasure. The night in which *he* drank out of the holy vessels."

An elaborate argument is based on the assumption that the prophet "speaks his own words," in xxxiii. 18; whereas I. E. merely writes, in explanation of *yehgeh*: "Thine heart shall *say within itself*." In a note on xxxviii. 21 it is proposed to interrupt the discussion on *figs* with the remark that two verbs are *in the imperative*, when, as it happens, they are not. But we might read, "like *cakes* (*maççoth*)," instead of "in the imperative." The emendation at xl. 18 cannot be accepted; but since *אֱלֹהִים* might easily be corrupted into *אֱלֹהִי*, the sense may be, that EL, " = *Elohim*, without the article. Comp. Josh. xxii. 22: [EL] *Elohim*, he knoweth." On xliii. 2 read *šarim*, *enemies*, for *šarim*, comparing xlvii. 14. There is certainly a difficulty at the commencement of chap. l.; but we shall not be far from the truth, if we say that the repudiation of "your mother" involves that of yourselves, regarded as the wife's *sons* — *בְּנֵי* for *אֲנִי* — which makes a transition to the plural, "I have sold *you*." Comp. lx. 1, 4, 8; lxiii. 16. R. D. K. mentions the *sons* expressly. It is remarked in a note on p. 299, that I. E. "refutes the opinion of Rashi, that *אֱלֹהִים* = *אֱלֹהִי*." But a later writer, R. S. Dubno, charges I. E. with misrepresenting Rashi.

It is evident from these specimen passages that the Society's edition of this valuable commentary is not without its blemishes; but though there is room enough in it for improvement, it may be welcomed as an attempt to supply an acknowledged want. Its mechanical execution is satisfactory, and typographical errors in the Hebrew are exceptional (pp. 82, 86, 269), though the same cannot be said for the Arabic (pp. 97, 175, 202, etc.). Certain of the minor conjectural emendations may be accepted, and some good readings have been contributed from the British Museum MS., Add 24896. Many of the notes contain valuable matter, but others are mere repetitions of what has been already stated in the text. It is to be hoped that Dr. Friedländer will continue his labours in the cause of Hebrew literature, for, though lacking the instinct of textual criticism, he may still do good service if he will be content to illustrate his author and record the variations of the MSS.

C. TAYLOR.

NOTICES OF NEW BOOKS.

Prophecies and the Prophetic Spirit in the Christian Era. An Historical Essay by J. F. I. v. Döllinger. Translated with Introduction, Notes, and Appendices by A. Plummer, M.A. Rivingtons.

It was said of Pearson that his very dust was gold, and so the translator seems to think of Dr. Döllinger. Yet it may be asked, if even chips from the workshop are to be enshrined so luxuriously, how is the

student to become acquainted with a tithe of the best fruits of continental scholarship? What a contrast is afforded by the unpretending little German volume (Raumer's *Historisches Taschenbuch* for 1871) from which this monograph is taken! The subject is happily chosen, and is of itself a sufficient recommendation; it is those singular outbursts of the prophetic spirit, which, not entirely unknown in our day, were especially frequent in the Middle Ages. Religious, dynastic, national, and cosmopolitan, such are the heads under which the Christian prophecies are arranged, those relating to the Church being included under the last; and the names of Merlin, St. Martin, S. Catherine of Siena, Fra Dolcino, Abbot Joachim, Roger Bacon, Dante, Savonarola, will show the variety and extent of the learned author's researches. Appearing in a historical periodical, it was natural that the essay should assume a purely historical character. But the theological bearings of the facts are well explained, agreeably to the spirit of Dr. Döllinger, in the introduction by the translator, who contrasts the grotesqueness and unworthy objects of the mediaeval prophecies with the simplicity and high moral purpose of the Biblical ones, and infers the superior credibility of the latter. The argument, as he himself points out, is similar to Canon Mozley's in the Bampton Lectures on Miracles. *Adhuc sub iudice lis est.* Until the subject of prophecy, and in particular the facts of Biblical prophecy, have been subjected to a more thorough and more impartial investigation, too unqualified statements on either side can only lead to misconception. It is but just to add that the translation is an accurate reproduction of the chaste simplicity of the original. The notes added by the translator are distinguished by brackets, and are useful; still higher praise is due to his appendices on A. The Lehnin Prophecy [a further discussion of this subject is reserved by the author]; B. Instances of persons prophetically summoned to appear before the tribunal of God; C. Theories respecting Antichrist; D. Merlin. The few trifles which follow may be of use in a second edition. P. 16; it might be added that Arndt in 1805 predicted that the Spaniards would be the first to rise against Napoleon. P. 20, comp. p. 79; the formula "appropinquante mundi termino" was the reverse of "a familiar one" in the tenth century. It began to be in use in the seventh, was a standing formula in the ninth, and went out of fashion for a time in the tenth. See the learned Benedictine, Dom François Plaine, *Rev. des questions historiques* 1873, who refers to de Wailly's *Elements de Paléographie*. P. 52. For the application of the visions of the Apocalypse to Papal Rome, the translator should have referred to Gabriele Rossetti's *Sullo Spirito Antipapale di Dante*, translated under the title *Disquisitions on the Antipapal Spirit which preceded the Reformation*, 2 vols., Lond., Smith & Elder, 1834 (a scarce book). P. 82 note; omit rash philology. P. 102 note. It is worth noting that from Cathari comes the German *Käzer*, heretic. P. 132. Notion of Dante's heterodoxy unfounded. Comp. a neglected poem by Piero Allighieri, son of Dante, in which, besides an interesting reference to the poet's musical productions, there occurs an indignant contradiction "of those who would say that the master of the faith was in error," concluding with the energetic verse, "Se fosse spenta" [la fide], "rifariàla Dante" (Trucchi's *Raccolta* ii. 148). We learn with regret that it is doubtful whether the author's supplementary essay on "Dante as a Prophet" will ever see the light. A glimpse of his view is however afforded by an expression on p. 130: "Dante, who, although in a way peculiar to himself, was also a Joachimite," and by a reference to a paper by Dr. Döllinger in Dr. Preger's important essay, "Dante's Metaphysics," in the *Transactions of the Munich Gesellschaft der Wissenschaften* for the current year. It appears that both Dr. Döllinger and Dr. Preger take Dante's Greyhound, "il Veltro" (*Inf.* i. 101), collectively, as a reference to a religious order of preaching ascetics, similar to the order predicted by Joachim, and described at p. 118 of this volume.

T. K. CHENEY.

Hermeneutics of the New Testament. By Dr. A. Immer. Wittenberg: Koelling. 1873.

THIS work of Dr. Immer's reads very much like a course of professorial lectures. We can believe that it would make a useful manual for students in theology, but we doubt whether it will either serve to convince those who differ from the views of the author or add very much to the knowledge of those who substantially agree with him. Distinctly the best portion is that which deals with exegesis. The rules laid down appear sound and sensible; the illustrations are worked out with clearness and method; and the analysis of detached passages shows thought and care, as well as considerable flexibility of mind.

On the other hand the sketch of the history of New Testament Hermeneutics and the treatment of the auxiliary branches seem to us less satisfactory. The historical sketch errs, as sketches of this kind are wont to err, both from excess and defect; partly for want of a sufficiently strict definition of the limits of the subject. Why, for instance, should the name of Gesenius be included (in an account of New Testament Hermeneutics) and that of Ewald entirely omitted? Why, again, should writers on the Biblical Theology of the New Testament find a place in the history which is denied to Biblical Theology itself in the body of the work; and why amongst these should

Schwegler and Scholten appear, while Reuss and Weiss and Ritschl are passed over? Why, lastly, should we be told at some length that Schulthess, Storr, Süskind, and the two Flatts are not important for New Testament Exegesis, while we hear nothing at all of exegetes of real note such as Hammond, Godet, Ellicott, and J. B. Lightfoot? But for the bare mention of Mill, J. Lightfoot, and a few geographical works, Dr. Immer would not seem to be aware that England had made any contribution whatever to the study of the New Testament. There may be too much excuse for this ignorance; but it has certainly lessened the value of Dr. Immer's work in more ways than one.

For instance, if he had known more of the recent history of text-criticism in England his treatment of this part of his subject might have been more complete. The same may be said of the section on Geography. The series of questions that are raised in regard to the topography of Jerusalem either should not have been touched upon at all, or else gone into more thoroughly than they are on p. 215. Neither are the data of the chronological problems in the section which follows given with any fulness. Caspari's *Chronologisch-geographische Einleitung in das Leben Jesu* and Wieseler's *Beiträge* should have been noticed.

However, it is clear that Dr. Immer has thrown his strength less into these parts of his work than into that which is concerned with exegesis proper. Here, if he does not quite reach the precision and scholarly tact of writers like Winer, Ellicott, or Meyer, still he is, as we have said, sound and judicious, and his method deserves attention.

The last division of the book is taken up with the relation of the commentator "to the religious interest." With regard to this it seems to us that little is to be gained by rule and precept. In this more than in any other field it is true that "le style c'est l'homme."

W. SANDAY.

The second and last part of Ibn Hisham's commentary on Ka'b ben Zohair's celebrated Qaṣida for the praise of the prophet, edited by Ignatius Guidi, has just appeared (Brockhaus, 1874). Commentaries on difficult poems by so accomplished a grammarian as Ibn Hisham (died 1359) are a great contribution both to Arabic grammar and lexicography. M. Guidi, who, as is shown by his own notes, written in Arabic, is well acquainted with the idiom of the Arabic grammarians, has given us a correct edition of the book, though he had only at his disposal the Vatican MS. and a collation of the most difficult passages from the Paris MS. The author's own additions and those of Prof. Fleischer are of great value for the correctness of the text. The six indices, viz.: 1. of the verses, 2. of the names of men, women, and tribes, 3. of the names of places, 4. of the names of books, 5. of words explained by the author, and finally, of the terminologies occurring in Ibn Hisham's commentary, facilitate greatly the use of the book.

Dr. Quarry has brought out a new edition of his *Genesis and its Authorship* (Williams & Norgate). The candour and thoroughness with which he handles a difficult subject have, we trust, been acknowledged by most competent judges. It is with regret however that we observe the sensitiveness of the "Notices of Animadversions of the Bishop of Natal" prefixed to the new edition. Would it not have been more dignified in the author to have "wrapped himself in his virtue," and trusted his reputation to his readers, and more regardful of the interests of the latter to have re-written and corrected not a few passages of his work, which seem deficient in comprehensiveness of view or clearness of exposition? The few lines inserted here and there in brackets in the new edition consist mainly of additional references, and are altogether beneath the occasion.

The first volume of *The Bible for Young People*, translated from the Dutch by Mr. P. H. Wicksteed, is now complete (Williams and Norgate). Its general purpose has been already described; we need only add that it is the work of an accomplished Biblical scholar (Dr. Oort), who has here at least kept his dangerous talent for conjecture in check. The work has been revised by Drs. Hooykaas and Kuenen, and the translation by Dr. Oort. The propriety of putting the results of advanced criticism before "young people" may perhaps appear questionable, but no older reader can rise from the perusal of the book without admiration for the learning so gracefully and modestly condensed, and respect for the moral earnestness with which some at least of the lessons of Genesis are inculcated.

It would require a close examination to do justice to the minuteness of the labour which Dr. Delitzsch bestows on the revision of his commentaries; see for instance the first volume, "corrected and enlarged," of his important work on the Psalms, which has just appeared in a third edition. In the preface, he acknowledges many suggestions from his English translator, Mr. Bolton, and refers throughout to the new edition of Hupfeld by Riehm, &c. The most important additions relate, as usual, to Hebrew etymologies. The author does not seem however to have observed Dr. Weir's emendations of the text of the Psalms in various numbers of the *Academy*, though a student of English, nor to have met with the commentaries of Dr. Kay and Canon Perowne. Perhaps too some attention might have been given to the striking though often adventurous suggestions of Dr. Grätz in his *Monatsschrift*.

It is impossible to find a good word for the unhappy translations of

Keim's *History*, vol. i., and Baur's *Paul*, vol. i., which have lately appeared in Messrs. Williams and Norgate's new series. The difficulties of the task are obvious, but cannot excuse the translator's gross ignorance, not only of technical terms, but even of grammar; we are glad to hear that effective measures have been taken for preventing a recurrence of this sad mishap.

Dr. Delitzsch has also brought out a tale of Jewish life in the time of King Herod Agrippa, called *Durch Krankheit zur Genesung* (Leipzig, Naumann). The local colour is faithfully given, in which the author was largely aided by his remarkable familiarity with the Talmud, and the interest of the narrative is well maintained.

Dr. Meyer has been more fortunate. The translation of his commentary on the N.T. (Edinburgh, T. and T. Clark), so far as it has gone, may vie for substantial accuracy with the best efforts of this kind, as indeed was only to be expected from the character of the editor, Dr. Dickson, well known as the translator of Mommsen's *Rome*. The revision, of which the latest results are here incorporated, was the last work of its distinguished author, who passed away on the 21st of June last. Dr. Meyer was born, as we learn from the editor, on Jan. 10, 1800, and began his commentary as a plain country clergyman about 1831. Honour to his memory!

Intelligence.

The Rev. T. W. Nutt, sub-librarian of the Bodleian Library, is about to bring out a fragment of the Samaritan *Thargum* (end of Leviticus and Numbers), contained in an old MS. of the Bodleian Library. Mr. Nutt gives in the preface a full account of the history of the Samaritans, of their theology and literature.

Mr. H. Mathews, B.A. (Exeter College), will shortly bring out Ibn Ezra's inedited commentary on the Song of Songs (according to the MSS. of the Bodleian Library and the National Library in Paris) with an English translation.

New Publications.

- BAUR, F. C. Paul, his Life and Work. Vol. i. From the German. Williams & Norgate.
 HENSLAW, G. The Theory of Evolution of Living Things and the Application of the Principles of Evolution to Religion, &c. Macmillan.
 KEIL, C. F. Lehrbuch der hist.-krit. Einleitung in das A. T. 3. gänzlich umgearb. Aufl. Frankfurt-a.-M.: Heyder u. Zimmer.
 LICHTENBERGER, F. Histoire des idées religieuses en Allemagne. Tome ii. Paris: Sandoz et Fischbacher.
 ORIGENIS contra Celsum Libri Tres. Recensuit, etc., W. Selwyn. Cambridge: Deighton, Bell, & Co.
 RAITHMAYR, F. X. Lehrbuch der bibl. Hermeneutik. Kempten: Kösel.
 SCHÜRER, E. Lehrbuch der neutestamentlichen Zeitgeschichte. Leipzig: Hinrichs.

Physical Science.

The Threshold of the Unknown Region. By Clements R. Markham, C.B., F.R.S., late of H.M. Arctic Ship "Assistance." With nine maps. London: Sampson Low.

THE unknown region to the borders of which Mr. Markham leads us is the most important space of the earth's surface yet unsubdued to knowledge, surrounding the Arctic pole and extending over an area of more than forty Englands.

King Alfred told the story of the first expedition to explore these hidden lands as early as A.D. 890, and till recent years Britain was ever foremost in conquering new ground from the unknown area; but since 1845 no British national expedition has been despatched to the Arctic seas, and other nations of Europe have taken up this task, and are yearly gaining that experience in polar travel which formerly was ours alone. The time has surely come for England to resume her place in the van of Arctic discovery, and no better plan could have been devised to rouse English enterprise again than that which has been taken by Mr. Markham in his clear and manly narrative of what has been done and what still remains to be done in this great field of research.

"Unlike the ocean-girt region of the Southern Pole, the Northern Polar region is surrounded, at a distance of about

1,200 miles from its centre, by the three great continents of our planet, while the enormous glacier-bearing mass of Greenland stretches away towards the Pole for an unknown distance. There are three approaches by sea to this land-girt end of the earth: through the wide ocean between Norway and Greenland, through Davis' Strait, and through Behring's Strait—one wide portal and two narrow gates." The wide ocean portal from the Atlantic was the first through which man sought to reach the mysterious regions of the pole; the story of the voyages made in this direction from the earliest to the most recent times forms the first part of the volume. Here are detailed, in pages full of interest, the earliest voyages of the discovery ships of the Muscovy Company of England, fitted out under the superintendence of the veteran Sebastian Cabot, opening the way towards Greenland and Novaya Zemlya; then the hardy voyage of Barents, who in seeking a passage round the north of Novaya Zemlya discovered Spitzbergen, and whose crew first braved the rigours of an Arctic winter; next that of Henry Hudson, in a little craft of eighty tons, to a high latitude on the east coast of Greenland and along the ice-edge to the north of Spitzbergen; the English and Dutch whaling voyages which followed, and through which a knowledge, almost as complete as we at present possess, of the Spitzbergen archipelago was obtained; the voyages of the Scoresbys; of Phipps with Horatio Nelson as midshipman of his vessel; of Buchan with Franklin as his lieutenant; and of the Russian Admiral Lütke to northward between Spitzbergen and Novaya Zemlya. At a certain line of packed ice of from ten to fifteen feet in thickness, somewhat further north in some years, and more southerly in others, every one of these voyagers was compelled to turn back, and all conclusively proved the impracticability of sailing to the North Pole. To these followed Parry's gallant attempt to march to the Pole over ice with boat sledges, and he, leaving his ship to northward of Spitzbergen, pressed on, over ice, to the highest latitude ($82^{\circ} 45'$) which has yet been attained in the Arctic region.

The German and Swedish expeditions directed towards this side of the unknown area are next passed in review; and these have done much to add to the more exact geography and meteorology of this apparently closed gateway to the pole. The older voyages of Barents, and more recently of several Norwegian fishermen, have shown that for several months in summer and autumn the seas to eastward of Novaya Zemlya are free from ice; so it seems probable that a vessel might be navigated in this direction to the "*polynia*" or open water reported by Russian explorers in the Siberian Seas, and possibly thence to northward. This is the route chosen for the Austrian national expedition under Payer and Weyprecht; the chief vessel of this expedition was last seen steaming round the north of Novaya Zemlya, and is now beginning its second winter in the Arctic region somewhere to north of Asia.

Mr. Markham turns now "to examine the voyages up Baffin Bay, where through great dangers and hair-breadth escapes a less formidable pack has for many years been annually encountered, battled with, and overcome." Davis, of Sandrudge in Devon, in 1585 was the discoverer of the broad strait between Greenland and Arctic America, and Baffin following in 1616 passed through it to the bay which bears his name, discovering also the numerous sounds and channels which lead out of it to north and west; but it was not till 1817 that British whaling voyages began to be made in the bay round which a large fleet now annually passes.

Baffin discovered the entrance to the sound named from Sir Thomas Smith, the then head of the East India Company, which leads directly north from his bay. This seems

to be the most open gateway to the unknown region, and is the only point in its borders in which lines of coast are known to stretch away towards the pole. Through this sound Dr. Kane in 1853, Hayes in 1860, and Hall in the past year have successively advanced further north, the last named voyager having attained a higher latitude ($82^{\circ} 16'$) than has ever before been reached by ship in the Arctic region—to within forty miles of the parallel gained by Parry in boat sledges over the Spitzbergen ice.

To Franklin, seeking a north-west passage round America to the Pacific, and to the expeditions fitted out in search of his missing vessels, under Belcher, Richards, McClintock, Osborn, Maclure, Collinson, and others, is due the whole of our knowledge of the archipelago which stretches from Baffin Bay westward to near Behring Strait; and each step in advance in this desolate archipelago, every point of which is memorable for some hardy achievement, is clearly followed by Mr. Markham, himself experienced in battling with the ice in this border land of the unknown.

From Behring Strait along the whole of Northern Asia completing the circuit, where the great Siberian rivers reach the Arctic Sea, our knowledge is entirely derived from the Russian explorers; and the story of the voyages made by Behring, by Chelyuskin, from whom the northmost cape of Asia is named, by Liakhof, the discoverer of the New Siberian Islands with their rich stores of mammoth bones, of Anjou and Wrangell venturing boldly out in dog sledges over the sea ice, forms another chapter of the highest interest.

Summing up the evidence collected all round the threshold of the unknown region, Mr. Markham proceeds to decide upon the best route for future Arctic exploration.

"As routes by Behring Strait and the Siberian seas are left out of the question for the present, as regards an English expedition, the number of routes by which the threshold of the unknown region may be passed is reduced to two—namely, the sea between Greenland and Novaya Zemlya, usually called the Spitzbergen route, and Smith Sound at the head of Baffin Bay." Contrasting the Spitzbergen route with that offered by Smith Sound, Mr. Markham decides unhesitatingly in favour of the latter.

"Since the days of Barents (1596), expedition after expedition has vainly attempted to make discoveries by the Spitzbergen route. The polar pack, constantly drifting south, has hitherto barred all progress in that direction," and "no valuable results in geology, botany, ethnology or geodesy could be obtained under any circumstances."

By the Smith Sound route, on the other hand, a favourable position can always be secured by ships; by this route also many hundreds of miles could be certainly examined by sledge parties; and there is ample supply of animal food to be found.

The final chapter is devoted to the results which are to be derived from such an exploration, and Mr. Markham shows well that there is no branch of science which would not benefit thereby. Besides the addition to be made to actual geography, the investigation of the temperature of the ocean in these regions would throw much light on the great thermal movements of the ocean; without actual observation in these regions, knowledge of oceanic circulation must remain in its present theoretical and unsatisfactory state. In geodesy, pendulum observations near the pole are requisite to complete the determination of the form of the earth; investigation there would advance geology both in its scientific aims in elucidating the past physical history of the globe, and in its practical results by the discovery of valuable minerals; and the flora of the Arctic region, though scanty, has been found to possess the greatest interest as pointing to vast changes in the condition and climate

of these regions ; the results to zoology would be of exceptional interest. "Seas which support whales and seals must be tenanted by myriads of fish and of those minute organisms which are disclosed by the dredging machine, while the presence of walrus tells us of submarine forests of sea-weed." The movements of a remarkable group of birds which annually disappear beyond the ken of man into this northern area, where some attractive spot must exist to account for their migration, would be solved by such exploration. For anthropology also there would be gain. "Although barely one half of the Arctic regions has been explored, yet abundant traces of former inhabitants are found throughout their most desert wastes, where now there is absolute solitude," and many considerations lead to the conclusion that a people may still exist north of Greenland who have for generations been isolated from the rest of the world.

"The same enterprise, courage, endurance, and presence of mind are required to conduct an Arctic expedition as to face an enemy in the field ; though in the former case these qualities are merely exercised in advancing civilization, extending knowledge, and exciting friendly sympathy and interest throughout the world.....Now, then, is the time for Old England to take her place once more in the van of Arctic discovery."

The volume is very appropriately dedicated to Sir George Back, the sole survivor of the party which under Franklin crossed the frozen lands of Arctic America.

KEITH JOHNSTON.

Notes on Scientific Work.

Geography.

The Andes of Chile.—The sheets of the newly-completed topographical and geological survey of Chile, carried out by Government under the direction of M. A. Pissis, have been received by the Royal Geographical Society. They give the first accurate delineation on a large scale of any portion of the vast chain of the Andes, and enable us to form some idea of the structure of this enormous ridge and of the plateaus and volcanic summits which compose it ; unfortunately the survey does not extend beyond the precise line of the Chilean frontier, and embraces only the western slopes from the water-parting line to the Pacific coast.

A number of papers treating of widely different portions of the globe are published in the last part of Petermann's *Mittheilungen*. Among them are letters by Dr. Bessels describing the wintering (in 1872-3) of a portion of the crew of the "Polaris" Arctic Expedition, at Life-boat Cove, near the entrance to Smith Sound, and a short account of a geological expedition to Spitzbergen by Dr. Richard v. Drasche.—An account is given of a survey that has been made by the engineers Joseph and Franz Keller for a railroad in the very heart of the forest region of South America, and which, it seems probable, will soon be constructed. The want of a high-road of communication with the interior province of Matto Grosso has long been felt in Eastern Brazil, and the plan now proposed is to extend the natural highway afforded by the great Madeira river from the Amazon as far up as the falls of St. Antonio, by making a railway onward from the falls along the left or Brazilian bank of the river ; such a line would also bring the resources of Bolivia into direct communication with Brazil.—A valuable paper by Dr. Behm treats of the newest discoveries and surveys in Eastern Australia, and gives a view of the present distribution of population in this part of the continent, and of the causes which have operated in bringing about a greater density at certain points of the country.—The series of letters describing the geography of the routes of the Russian expedition to Khiva is also continued.—The expedition under Gerhard Rohlfs for the exploration of the Libyan desert is now fully organised, and preparations were being rapidly made for starting during November of the present year ; fifty years have elapsed since any scientific traveller visited this part of Africa, and results of great value to geographical science may be anticipated from the present undertaking.

Zoology.

Veddah Skulls.—Prof. Macalister describes two very fine Veddah skulls sent to the Museum of Trinity College, Dublin, by Mr. Sharpe. The skulls of this little-known race are remarkable for their small size and lightness, and for their great proportional height ; they are also

exceedingly narrow, long, and oval, dolicho-cephalic, orthognathous, and phaeozygous. Comparing the internal capacity of ten Veddah skulls the average is 66 oz., which contrasts with an average of 88 to 90 oz. for English and Irish skulls. Of the two skulls sent one was of a male and the other a female. This latter was, in addition to the ordinary characteristics, cryptozygous with a trace of the frontal suture and a coronal suture, which was straight above and below, and very completely denticulated for the middle third, its upper surface being convex nearly to ridging. The sagittal suture is coarsely carinated. The occipital crest is well marked, and the under lips of the foramen magnum are unusually prominent. There are two very remarkable lingulae on the exoccipital bone which project outwards and backwards. A table of comparative measurements is given of the above skulls, and of eleven in Dr. Bernard Davis' collection. This paper may easily be overlooked by some to whom it will be of great interest, as it is published in the *Journal of the Royal Geological Society of Ireland*, vol. 3, p. 96.

The Lancelet.—The University of Dorpat recently commissioned Dr. Ludwig Stieda to proceed to Naples for the purpose of studying the structure of the Cephalopods. While there Dr. Stieda formed a collection of this most interesting vertebrate ; some specimens he preserved in spirit, others in chromic acid, and he examined them at leisure, as the opportunity did not present itself for the investigation of their anatomical characters at the time. Known now for nearly a century, this simply organised fish and lowest form of vertebrate has been often studied, Rathke, Johannes Müller, Goodsir, Kölliker, Max Schultze, Leuckart Kowalevsky, and many others having written important memoirs on its anatomy and development. It has been found in suitable localities all over the world—that is to say if one may assume that there is but a single species, as seems more than probable. It was first found on the Cornish Coast by Pallas, and since near the Isle of Man (Forbes), on the West of Ireland (Wright), Gothenburg (Retzius), Naples (Costa), Algiers (Wilde), Brazil (J. Müller), Peru (Harting), Borneo (Gervais), East Coast of Africa (Wright), Chinese Seas (Richardson). Though so much had already been written about the Lancelet there was yet room for the excellent memoir of Stieda. Referring fully to the labours of others, he corrects, amends, or adds to them. By a series of thin sections made of specimens from spirit and chromic acid, he has been enabled to examine very carefully the structure of the *Chorda dorsalis*, which seems to be made up of a number of very elongated fibrous cells which run obliquely through the Chorda and partly mingle with one another in the transverse direction and partly in the longitudinal extension of the Chorda. All the different systems are treated of in detail. The male and female Lancelet cannot be externally distinguished from each other, but a microscopical examination settles the question at once, and Owen's suggestion that the *Amphioxus* may prove to be the larvae of some larger unknown fish is rendered improbable. Four excellent plates illustrate the memoir, which is printed in the *Mém. de l'Acad. Imp. de St. Pétersburg*, Tome xix., 1873, No. 7.

Orab Parasites.—While a student in the laboratory for experimental zoology, established at Roscoff under the direction of M. de Lacaze-Duthiers, M. A. Giard devoted himself to investigating the anatomy and development of those curious parasites belonging to the genera *Sacculina*, *Pellogaster*, &c. These Rhizocephala are undoubtedly Cirripedia degraded by parasitism. The investigations of Lilljeborg and Fritz Müller settled this point. Although some biologists still appear to trace an affinity between this group and the parasitic crustacea belonging to the family *Bopyridae*, their embryology shows no real affinity. Several species of these parasites occurred commonly at Roscoff : at least two-thirds of all the specimens of *Carcinus maenas* collected were infested with *Sacculina carcini* ; *Pellogaster paguri* was a good deal less abundant, and *P. albidus* was also found. It is to be hoped that the investigations of M. Giard will be published in extenso, with a résumé of all that is now known respecting this section of the Cirripeds. (*Compt. rend.* 27th October, 1873, pp. 945, 948.)

New Mushroom-Mite.—M. Mégnin describes a new species of the genus *Tyroglyphus* which has been discovered in vast numbers in the substance of the common mushroom ; from the peculiar form of its mandibles it has been named *T. rostro-serratus*. Minute details of both sexes of this species will be found in this memoir, in which the author claims to have proved that the *Hypopus feroniarum* of Dufour is nothing but a stage of the *Tyroglyphus* ; that certain adventive nymphae, moreover, of the *Tyroglyphus* are transformed into *Hypopi*, and reciprocally that the *Hypopi* can change themselves into the nymphae of *Tyroglyphi*, and he suggests that these *Hypopi* play as regards the *Tyroglyphi* the same rôle that the kystes de conservation of M. Gerbe do towards the *Kolpodi*. These *Hypopi* seem charged as Heteromorphs with the conservation and dissemination of the species. This suggests the interesting question : Have all the mites adventive-heteromorphic nymphae or *Hypopi* in addition to their ordinary nymphae ? This problem the author hopes to be able to solve. Among the eleven species of *Hypopus*, described by Dufour, he recognises six which he does not doubt are related to different mites. An extended memoir on this subject is promised. (*Journ. de l'Anat. et de la Physiol.* Tom. ix., August, 1873, p. 369.)

Cetacean Parasites.—Mr. W. H. Dall, of the U.S. Coast Survey, describes a number of new species of whale parasites. Of these belonging to the genus *Cyamus*, he records *Cy. Scammoni*, found on the Californian gray whale, *Rhachianectes glaucus* Cope; *Cy. suffusus*, on the "humpback" whale *Megaptera versabilis* Cope, and *Cy. mysticeti*, on the "bowhead" whale; this latter is probably the *Balaena mysticetus* Linn. No Pycnogonoids were found, nor have any been reported from the Cetacea of the Californian coast. Of Cirripedia, both *Coronula balaenaris* and *C. diadema* were met with, and a remarkable new genus and species *Cryptolepas racchianecti* is described; this species is found sessile on *R. glaucus*. They were first observed on specimens of that species hauled up on the beach at Monterey; the superior surface of the lateral laminae being covered by the black skin of the whale were not visible at first; when the animal was removed from its native element it protruded its bright yellow hood in every direction to a surprising distance, presenting a very singular appearance. A new species of *Otton*, *O. Stimpsoni*, is described as occurring attached to the Coronulae infesting the humpback. The author states that Capt. Scammon is about to publish a monograph of the Cetaceans of the N.W. Coast of America. (*Proc. Californian Acad. Sciences*, vol. iv., pp. 281 and 299.)

Physiology.

The Number of Red Globules in the Blood.—A treatise by M. Malassez, of which we gave a preliminary notice in our February number, has just appeared. The orthography of M. Malassez' and M. Potain's name is here given correctly, with some additional particulars. The author gives the results of some researches he has made with a modification of the apparatus suggested by M. Potain. In his method a thermometer tube is employed which is accurately divided at one end into millimeters; near the other extremity there is a small dilatation having one hundred times the capacity of the graduated part. The latter part is filled with blood, and the tube is then immersed in serum, which is sucked up into the dilatation, carrying of course the blood before it. The blood is thus diluted one hundred times. The mixture is again blown out of the bulb, and the number of globules in the graduated portion of the tube carefully determined by actual counting under the microscope. An easy calculation will now give the number of corpuscles in a given quantity of the blood under examination. The author describes various points that have to be attended to both in the construction of the tube and in the method of counting. In the dog, M. Malassez finds that the blood of the carotid contains 3,410,000 corpuscles in one cubic millimeter, the blood of an artery distributed to the digastric muscle 3,780,000 corpuscles. In a rabbit, arterial blood contained five million corpuscles in the cubic millimeter, and venous blood five million eight hundred thousand corpuscles. The number of red corpuscles therefore differs considerably in different portions of the circulatory apparatus. The diminution observed in some parts may be due, on the one hand, to a destruction of the globules, as in the liver (real diminution), or to the absorption of the fluid parts of the blood, as in the intestine during digestion, thus producing an apparent diminution. When an increase in the number of corpuscles is observed it may be due either to the formation of globules, as in the spleen, causing a real augmentation, or to the exosmosis of a certain quantity of the fluid parts of the blood, as in the salivary glands and the kidneys, where the augmentation is only apparent. A result of this is that the variation in the number of globules is much greater in different portions of the venous system than in the several parts of the arterial system.

Physiology of the Peristaltic Movements of the Intestines.—An interesting and original paper on this somewhat neglected subject has recently been published in the *Centralblatt für die medicinische Wissenschaften* by Dr. Alexis Horvath, of Kieff. Horvath points out the numerous difficulties attending an investigation of the intestinal movements, and shows that the temperature of the air to which when the abdomen is opened the intestines are exposed influences in a remarkable degree the activity of the movements that can be induced in them by nervous excitation. When the temperature of the intestines is reduced below 66° F. they exhibit no movements. This observation explains in some measure the extremely discrepant statements made by different physiologists of high standing, and will render a repetition of their experiments necessary.

Absorption of Fat.—L. v. Thanhoffer describes (*Pester Med. Chir. Presse*, 1873, No. 22) the epithelial cells of the intestine of the frog as exhibiting fine pseudopodia or ciliaform processes, which are alternately thrust out and withdrawn and take up on their return the fatty particles contained in the food. The movement of the processes could only be observed in those frogs that had their spinal cord or medulla oblongata stuck through by a knife, and even under these conditions it was noticed in only half the cases examined. The peculiar appearance of rods exhibited by this epithelium, and described by Funke, Brettauer, and Steinach and others is due to these processes being seen when in the retracted state. V. Thanhoffer has seen similar processes, but never in movement, in the intestinal epithelium of mammals.

The band to which the processes are attached is annular and forms the edge of the cell-membrane.

Retrogressive Metamorphosis of Albumen in the Body.—Prof. Hoppe-Seyler discusses in *Pflüger's Archiv*, 1873, Band vi., p. 399, the question, In what part of the body does the disintegration of albumen take place? He has arrived at the conclusion that neither the blood nor the lymph contains any ferment, and that neither do they possess the oxidizing power which can justify us in assuming albuminous compounds can undergo disintegration whilst still contained in them. There are good chemical grounds, on the other hand, for believing that such decomposition takes place in the albuminous compounds forming part of gland-substance and muscle. Hence he considers the doctrine of the formation of urea in the blood or the luxus consumption of Voit to be untenable.

The Numerical Proportion of Nerve Fibres to Muscular Fibres.—P. Tergast has carefully studied (*Max Schultze's Archiv für micr. Anat.* ix. 36) the relation of the number of primitive nerve fibres to the number of primitive muscular fasciculi in the muscles of the eye in sheep. In these muscles, as in the sartorius of the frog, examined by Kühne, the muscular fibres extend the whole length of the muscle, and Tergast therefore proceeded to count the number of fibres which are seen in a cross section. The number of primitive nerve fibres was estimated in the same way. For each primitive nerve fibre in the musculus obliquus inferior there are three or four muscular fibres; in the m. obliquus superior six or seven; in the m. rectus inferior seven or eight; in the m. rectus internus eight; and for the m. rectus externus ten muscular fibres. Hence it appears that in the sheep there are on the average about six or seven primitive muscular fasciculi to each nerve fibre. In the human eye there appear to be three primitive nerve fibres to every seven muscular fibres. Such muscles as do not admit of being so exactly estimated as those of the eye receive relatively a very much smaller number of primitive nerve fibres. In the biceps of a young dog, for instance, M. Tergast finds only one primitive nerve fibre to 83 muscular fibres; the musculus sartorius of the young dog has one nerve fibre to from 40 to 60 muscular fibres. In the cutaneous pectoral of the frog there is one nerve fibre to from 23 to 27 muscular fibres (Reichert). In the abductor digiti quinti pedis the proportion is 1 to 40; in the sartorius 1 to 16½. In the ocular muscles of the frog the proportion on the average amounts to 1 to 10. In the caudal muscles of the mouse there are from 28 to 29 muscular fibres to each nerve fibre.

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Philology.

Études de Grammaire Comparée: l'S causatif et le thème N dans les Langues de Sem et de Cham. Par L'Abbé Victor Annessi. Maisonneuve.

THE work before us, short as it is, is a most valuable contribution to Semitic Philology. I cannot, indeed, agree with the two primary articles of M. Annessi's creed—the bilateralism of Semitic roots, and the common origin of Aryan and Semitic; but these do not affect his facts or his method. He has followed the right course in his investigations by calling in the aid of old Egyptian and the sub-Semitic dialects of Africa. In no other way are we likely,

to resolve the many grammatical riddles of a group of languages, too closely related for wide-reaching comparisons and, unlike the Neo-Latin dialects, without any known mother-tongue.

Both the causative *S* and the theme *N* formed part of the verbal machinery of old Egyptian, though used also in that language as independent substantive verbs. They are still found as preformatives in many Coptic words, just as in the numerous secondary Shaphel and Niphal roots in the Semitic languages of which M. Annessi gives examples. A large number of the radicals which are grouped under the letters *y* and *w* in a Semitic dictionary are really derivative formations of this kind; whether this proves the bilateralism of the Semitic parent-language, as M. Annessi believes, is a different matter. *ny* and *ny* or *ny* and *ny*, are as far from being bilateral as *pw* and *py*; and as I have shown elsewhere, it is very possible that these very roots are merely loan-words. However that may be, the way in which M. Annessi traces the development of the grammatical uses of the two themes out of their original substantive notion is very striking. On the basis of M. Maspero's able researches, he finds the old substantive verb *an* in the first syllable of the Egyptian and Semitic first and second personal pronouns, and then follows it through all its transformations into demonstrative, relative, interrogative, negative, and finally, passive characteristic. In the course of his inquiries he throws out a good many interesting remarks; not the least so being his reference of the third personal pronoun (*ny* *ny*) to the substantive verb which is so common in Hebrew.

Here and there, of course, his statements may be questioned. I should doubt the connection of the nasal negative with the theme *N* which the author is discussing, since the several Semitic dialects keep it carefully distinct from the latter in form. Then, again, I cannot agree with the explanation which Annessi (following Maspero) gives of the second element in the first personal pronoun, but must still adhere to the views expressed in my "Assyrian Grammar." For reasons given in the same work, again, words like *ny*, *ny*, would have nothing to do with the theme *N*, but would be old plurals, *n* standing for a more primitive *m*. Nor would most philologists assent to the view that the demonstrative is derived from the substantive verb. I am no believer in the so-called pronominal roots, but the idea of locality is certainly prior in language to that of simple existence. Moreover, old Egyptian is, on the one side, a highly advanced language, and, on the other, not the parent, but at most the sister of the parent, of the Semitic dialects. Such being the case, we ought to seek for some common material notion which would lie at the bottom of both the demonstrative and the substantive verb.

It is impossible here to touch upon the many interesting questions called up by M. Annessi's brochure. He promises us a further work on other substantive themes, like *ny* and *ny*, and we shall look forward to a continuation of researches, the first instalment of which only makes us desirous of more. Semitic Philology is still a dark field, and there are few better qualified than M. Annessi to labour in it.

A. H. SAYCE.

Bernays on the Politics of Aristotle. [Aristoteles' Politik, Erstes, Zweites, und Drittes Buch: mit erklärenden Zusätzen im Deutsche übertragen von Jacob Bernays.] Berlin, 1872. Hertz. London: Williams & Norgate.

OF the *Politics* of Aristotle Mons. C. Thurot remarks with truth in his *Études sur Aristote*, "Il est peu d'ouvrages d'Aristote qui soient aussi célèbres et aujourd'hui aussi populaires: il en est peu dont le texte, quoique intelligible

dans l'ensemble, nous soit parvenu en aussi mauvais état."* These words indicate clearly the task which a modern editor of the work has before him. The matter of the treatise is in most cases and taken as a whole intelligible enough, though the form (admirably described by Prof. Bernays on p. 212 of the present work) needs expansion and articulation to bring the full force of the language and treatment before the modern reader. With the text the case is different; the most cursory inspection of the vulgate as it issued from the hands of Bekker will reveal its almost hopeless condition, while an examination of the materials for improvement furnished by existing MSS. yields but little encouragement. All the extant MSS., says Thurot, have a common origin, and even the Γ of Susemihl, the lost source of William of Moerbeka's translation, seems to have belonged to the same family. Here then is a task not unworthy of the boldest scholar: the work cannot be neglected, for besides being the foundation of all political philosophy it is still one of the best works on the subject, and is always popular when political speculation is rife—at the close of the last century it was twice translated into German, it was the constant companion of Dr. Arnold, who is said to have known it by heart, and St. Hilaire published his second edition in 1848 in the midst of his labours as a member of the Provisional Government: and yet the text is in such a condition that one is sometimes almost inclined to trace with Conring the "*blattarum ac tinearum epulae*" of Scepis in every chapter and paragraph.

Professor Bernays' fragment (we trust it may not long remain so) does not of course aim so high as a complete edition; but it does much for interpretation and much for criticism, as any work by its learned and accomplished author is sure to do. Taking Themistius for his model, he has produced a paraphrase of Bks. i.-iii. which combines with singular success the accuracy of a scholarly translation and the illustration generally sought in a critical exegesis, without sacrificing that elegance of style with which readers of Prof. Bernays' other works are familiar. It is impossible in a short notice to give extracts; but any one who will be at the pains to compare, with the Greek text before him, the more literal translation of Stahr or the freer paraphrase (miscalled a translation) of St. Hilaire with Prof. Bernays' work will readily discern the superiority of the latter; the only fault in fact to be found with the book is that it is incomplete, and that is a fault which we may be permitted to hope will ere long be remedied. Where so much is valuable it is perhaps ungracious to criticise; but there are one or two passages where we should be disposed to join issue with Prof. Bernays. In i. 13, for instance, the words ἡ διαφέρει τοῦτο πλείστον are rendered "aber hier findet doch ein grosser Unterschied statt"; the passage as it stands is very strange and cannot easily be brought into relation with the context, but we doubt whether ἡ can be literally or freely rendered "aber." Again in ii. 8, Aristotle lays aside the further pursuit of a certain line of inquiry with the words ἄλλων γὰρ ἐστὶ καιρῶν, which Prof. Bernays renders "denn sie erfordert mehr Zeit als wir jetzt haben"; surely it is here a fitting opportunity and not time which is regarded as wanting. Lastly in the well-known passage concerning the power of the Spartan kings, iii. 14, κτείνειν γὰρ οὐ κύριος, εἰ μὴ ἐν τινι βασιλείᾳ (where the vulgate as it stands is unintelligible), Prof. Bernays strikes out βασιλείᾳ and renders the foregoing words "ausser in gewissen Fällen"; this is surely a somewhat forced construction; we much prefer the suggestion of Mr. Bywater

* *Etudes sur Aristote*, p. vi. Oncken and Spengel (the latter quoted by Oncken) express themselves to the same effect; see the former's learned and valuable work, *Die Staatslehre des Aristoteles*, p. 66. See also Hildenbrand, *Rechts- und Staatsphilosophie*, i. p. 342 ff.

in the *Journal of Philology*, that the true reading is ἐνεκα δουλίας for ἐν τινι βασιλείᾳ: this very ingenious conjecture not only rests on sound palaeographical grounds, but completely and satisfactorily clears up the difficulty.

A commentator on the *Politics* must, as we have said, do more than illustrate and explain; he must make the text which he explains: for the vulgate, notwithstanding the efforts of Bekker, presents insuperable difficulties. The edition of Conring published in 1656 represents one extreme view of the condition of the text; it is as full of stars as an astronomical diagram; the opposite view is exhibited by Goettling, who is very sparing in emendation and boasts (perhaps prematurely) that he has banished from his text the stars which even Schneider and Coray had left. Conring no doubt is fanciful, and it may be that his knowledge of Greek is as Schneider says superficial; but his acuteness is indisputable, and his edition raised questions which criticism cannot yet be said to have set at rest. The opinion of Prof. Oncken on this point deserves attention: "Ich denke von der Reinheit des Textes der *Politik* ganz anders als Stahr, Götting, Barthélémy St. Hilaire, und bin Ketzor genug, um sogar die Meinung auszusprechen, dass, wenn auch der viel belächelte 'Asteriskenhimmel' des Hermann Conring nunmehr ganz verschollen ist, an sehr vielen Stellen nur das Zeichen, nicht aber die Lücke oder Unebenheit verschwunden ist."*

Prof. Bernays' view of the matter may be inferred from the fact that in the three books he has taken in hand he has found it necessary to make more than a hundred variations from the text as Bekker left it, and that at least one passage he surrenders as so far hopeless.† For several of his emendations he is indebted to the labours of his predecessors; but there are many, and those not the least important, which so far as we have been able to discover are entirely due to the ripe scholarship and profound erudition of Prof. Bernays himself. It is impossible at present to examine these in detail, but we think they will generally commend themselves to the judgment of scholars, though in at least two cases to be shortly mentioned Prof. Vahlen has expressed his dissent from them. We could wish Prof. Bernays had done something more for the elucidation of Aristotle's criticism of Plato's βουλή in the *Laws* in *Pol.* ii. 6: the passage as it stands is justly compared by Goettling (*Fend Progr.* 1855) to Goethe's "Hexen-Einmal-Eins;" but we are disposed to think it is capable of satisfactory emendation, and though Prof. Bernays has commenced he has scarcely completed the cure. In ii. 7 we are surprised that Prof. Bernays has not adopted the very elegant and satisfactory emendation of Rassow (whom Boiesen had preceded) of ἀνεν ἐπιθυμιῶν for the ordinary ἀν ἐπιθυμοῖεν instead of omitting the latter words: the reading of Rassow and Boiesen is almost determined by the parallel passage in *Eth. Nic.* vii. 13, with which the vulgates directly at variance. In ii. 8 we are disposed to agree with Prof. Vahlen (*Beitr. zur Arist. Poet.* iii. 314) in questioning the propriety of reading ὁλίγους for ὁμοίους or ὁμοίως; but we cannot think Prof. Vahlen has been equally successful in combating what is perhaps the most elegant and convincing of all Prof. Bernays' emendations: the passage (ii. 5) runs in Bekker's text χρή προσέχειν τῇ πολλῇ χρόνῃ καὶ τοῖς πολλοῖς ἔτεσιν, the tautology of which it is

* *Die Staatslehre des Aristoteles*, p. 66.

† ii. 2, ἐν τοῖς τοῖς δὲ μμείσθαι τὸ ἐν μέρει τοὺς τοὺς εἰκὸς ὁμοίως τοῖς ἐξ ἀρχῆς. Prof. Bernays says, "für δὲ μμείσθαι eine annehmbare Vermuthung bis jetzt nicht vorliegt." We suggest with much hesitation ἐν τοῖς τοῖς ἀνομοιοῦσθαι ἐν μέρει τοὺς τοὺς εἰκὸς ὁμοίως ὄντας ἐξ ἀρχῆς, comparing what is said about the ποδανειπτήρ of Amasis in i. 12. But such a remedy must be admitted to be desperate, though not more so than Susemihl's.

difficult to defend or deny: Prof. Bernays (*Hermes* v. 301) regards the passage as a quotation from Simonides twice cited by Plutarch, and for *ἔτεσιν* restores *ἔθνεσιν* from one of those passages: this seems to us very convincing, but Prof. Vahlen (*Zeitschr. für Ost. Gymn.* xxi. 828) who has used the passage as it stands for the illustration of an Aristotelian fragment found also in Plutarch—*ἐκ πολλῶν ἔθων καὶ παλαιοῦ χρόνου*—defends the vulgate reading and cites a passage from Aeschines—*παλαιότητος καὶ πλήθους ἔθων*—to illustrate his own view; he adds, what is quite true, that it is not proved but only suggested that the words which justify *ἔθνεσιν* belong to Simonides and not to Plutarch himself. It is perhaps presumptuous to attempt to decide where two such authorities are at variance; but it seems to us that the conjecture of Prof. Bernays at once explains the text of Plutarch and restores that of Aristotle, while it is scarcely necessary to point out to Prof. Vahlen that *παλαιοῦ χρόνου* and *πολλῶν ἔθων* are not identical terms, while *πολλῶν χρόνων* and *πολλοῖς ἔτεσιν* are.

We cannot conclude without cordially recommending Prof. Bernays' little book to the notice of all students of Aristotle, and repeating the hope that its only fault may be speedily remedied by the completion of the work.

JAMES R. THURSFIELD.

A History of Roman Literature. By W. S. Teuffel, Professor at Tübingen. Translated with the author's sanction by Wilhelm Wagner, Ph.D. London: Bell.

ANY one who wished to show why it is that German work is apt to be so much superior to English, could hardly find a better example than the book before us. It embodies the results of a life of research in a succinct, but not abridged, form: it is up to the very latest level of Latin philological knowledge, and it is written in a style never heavy and generally lively and interesting.

The general plan of the work is as follows; it will at once be evident why this, the latest history of Latin literature, is likely to supersede its predecessors, more especially the cumbrous and somewhat pedantic work of Bernhardt.

After a general introduction on the various developments of Latin literature as a whole, and a brief account of the scanty relics of a really ancient time, e.g. the *Carmen Saliare*, the *Carmen Fratrum Arvalium*, the laws of the Twelve Tables, the earliest inscriptions, the *Fasti*, the *Annales Pontificum*, &c., the actually extant literature is divided into three periods: (1) From Andronicus to Sulla, 514-670 A.U.C.; (2) the Golden Age, 671-770; (3) the Imperial Period, beginning with the principate of Tiberius and reaching to the eighth century of the Christian era. Each of these periods is described generally and then subdivided into epochs. In each epoch poets and prose writers are treated separately: and under the latter head are included the grammarians and jurists (this last a most important section), each handled with as much fulness of detail as the historians, orators, or writers of philosophy.

It is however in the lucid and methodical arrangement of the facts relating to each separate author that the great merit and charm of the work lies. Thus the article *P. Vergilius Maro* contains (1) an account of the sources for the poet's life, (2) a discussion on the orthography of his name, (3) a brief life, (4) his personal appearance, (5) his circumstances: in each case the authorities are quoted *in extenso*. Then follows a description, drawn up similarly in brief sections, of his character as man and poet, his mode of composition, his political relations with the leading men of the time; then a detailed account of the *Eclogues*, *Georgics*, and *Aeneid*, the date of each, their

peculiarities of manner and diction (including what I consider a too disparaging criticism of the strophical composition traceable in some of the *Eclogues*), the principal MSS. and editions; lastly an account of the *Ciris Culex*, *Moretum*, *Catalecta*, and other short poems ascribed to Virgil. Attached are references to the various treatises, dissertations, programmes, &c., which treat of special matters affecting Virgil's life or poetry: a merit for which scholars will feel really grateful to Dr. Teuffel; for it is well known that these short monographs often contain in the compass of a few pages most of the available material still left us on the more out-of-the-way subjects of classical literature.

Another great excellence of Dr. Teuffel's book is the care with which he compares contemporary styles, and traces in them the peculiarities of their epoch, or their deviations from it: a good specimen is his comparison of Gaius, Suetonius, and Fronto, p. 246, vol. ii.; a parallel excellence is the introduction of the principal Greek writers of each period. Those who are interested in the early literature of Christianity will find these writers treated with fulness and impartiality; the author is, as might be expected, aware of their failings and at times severe upon them; indeed it might be wished that he had allowed himself a little more freedom on this head, and that the striking phenomenon of the coincidence in the progress of Christianity with the decline of all literary power had received more copious treatment from a writer at once so able and in such full command of all the resources necessary for forming an adequate judgment. Was it or was it not an accident that the poems of Iuvencus synchronized with the age of Constantine?

There are of course many views in so extensive a work which seem open to criticism. We are not inclined to regard Calvus or Varro Atacinus as the equal of Catullus, though the style of Calvus seems to have been like that of Catullus and the extant fragments of Varro's *Chorographia* are good enough to make us wish we had more. To speak of Euhemerism as a mad and blasphemous system (p. 133) is surely an exaggeration; it was at least a praiseworthy attempt to rationalize mythology and it certainly marks a stage in intellectual progress. Nor can we accept the prevailing view of the present time as to the incapacity of Nonius; a man whose services in preserving so much of the ancient language and literature have attracted a microscopic attention which exaggerates his defects: at any rate it seems questionable whether he can fairly be called a *tiro* (ii. p. 307). The view that the satire ascribed to Sulpicia is a modern forgery has already been combated by me (*Academy* i. p. 87); and I may say that every fresh perusal has strengthened the conviction of its genuineness there put forward.

Among omissions the most signal is Mayor's *Juvenal*, a work which we feel sure Dr. Teuffel can never have seen; probably owing to the accident of its being out of print. It is much to be hoped that this exhaustive and admirable edition will soon be completed in its new form. Mr. Paley's *Propertius*, though not a work of the same calibre, might also have been mentioned. Mr. Sellar's *Roman Poets of the Republic* is a work which in its most important section, the chapters on Lucretius, deserves Dr. Teuffel's attention, though even in England it cannot be said to be well known. After all, in spite of the labour spent on classical study in this country, we can point to no work of a serious and substantive kind on the literature of Rome; the old associations of philology with *chefs d'œuvre* of Greek and Latin versification, against which Germany has always presented a standing protest, still dominates our great schools, and determines more than anything else the scale of honours in at least one of our universities. How can we look for anything like real progress or real research? for investigation

of sources, study of MSS., all that gives its excellence to German work?

Dr. Wagner's translation, though by no means irreproachable, succeeds in preserving the liveliness of the original: some cases of rather questionable English and a considerable number of misprints, generally it is true of single letters, will no doubt find correction in a new edition. R. ELLIS.

Contents of the Journals.

Mnemosyne. New Series. Vol. i., pt. 4.—The principal articles in the current number are (1) a series of critical observations on Heliodorus by Naber; (2) notes on the text of Plutarch's *Moralia* by Cobet, who naturally finds that Hercher, the most recent editor, has left a good deal for others to do after him: a large proportion of Cobet's proposals are of the most convincing kind; (3) Herodotea and Thucydidea, by Dr. Badham; (4) *Coniectanea Latina* (on passages in Juvenal, Horace, Vergil, and Propertius) by H. van Herwerden—a production which hardly deserves a place in a journal like the *Mnemosyne*, unless it is inserted in order to bring conjectural criticism into discredit. What is one to think of a scholar who, commenting on the words, "ut mendax aretalogus" in Juvenal xv. 16, has the courage to print the astonishing remark, "vide ne hic sit aptius TERATOLOGUS"?

Notes and Intelligence.

M. Lenormant has published another volume of his admirable *Études Accadiennes*. It contains an Accadian syllabary, with the meanings of the several ideographs, a justification of the name Accadian, and additions and corrections to the grammar of the language from unpublished inscriptions which he has examined in the British Museum since the publication of his two earlier volumes. M. Lenormant claims with good reason that his syllabary is the largest and most complete yet published; and yet so numerous were the characters used that many might still be added to his list. Every student could, of course, discover deficiencies in it, since no single scholar can be expected to know all the phonetic values and significations of the ideographs met with in the inscriptions. Thus the character numbered 54 means "a shadow" (Ass. *tsalidu*), that numbered 73 "rest" or "setting" (Ass. *tarbatsu*), that numbered 112 "a building," and so on. I confess, however, to some surprise at finding the character which is sounded *tir* (No. 354) set down as denoting "tribe," "tongue." It really means "life," as the tablets inform us; and it is clearly connected with *ti* and *tila*. M. Lenormant seems to me to have fully disproved the novel view of M. Oppert that the old Turanian language of Chaldaea was termed Sumerian, and to have shown that it really belonged to the Accadians. His conclusion is that Sumiri is the Shinar of Scripture, and signifies the Semitic population which settled in the northern part of Babylonia and from the time of Sargon of Agane downwards played a leading part in Chaldaean history. M. Oppert has pointed out that the Sumirians are identified with the Assyrians; but the ideographic equivalent of Sumiri, which the latter scholar interprets "holy language," M. Lenormant thinks should rather be rendered "home dialect." A. H. SAYCE.

Dr. Harkavy of St. Petersburg, the author of the Mahometan documents on the Slaves and the Russians (*Skazania musulmanskich pissateley o Slavanach u Ruskich*, St. Petersburg, 1870-71), is now in England entrusted with a mission from his Government in order to copy the Arabic documents relating to the Slavonic Nations. We understand that he was fortunate enough to find many unknown documents on the subject in the MSS. of the British Museum and the Bodleian Library. Dr. Harkavy is also engaged in compiling the catalogue of the important Samaritan collection, bought by the Russian Government from M. Firkovitz, the celebrated owner of the Karaitic MSS. now in the Imperial Library of St. Petersburg. For this purpose Dr. Harkavy has examined the Samaritan MSS. of the libraries of Berlin, Paris, the British Museum, and the Bodleian Library.

A neat reprint of Voltaire's *Anciens Proverbes Basques et Gascons*, with both the original and modern Basque orthography, and parallel proverbs in other languages, has just been published by Cazals, Bayonne. An appendix gives a version of the well-known passage in Rabelais into modern Basque, by M. Archu, and some rather miscellaneous remarks on Basque bibliography. 100 copies only are on sale.

New Publications.

COCHERIS, H. *Origine et formation des noms de lieu*. Paris: Lib. de l'Echo de la Sorbonne.

GABLENTZ, H. C. v. der. *Die melanesischen Sprachen nach ihrem grammat. Bau und ihrer Verwandtschaft unter sich und mit den malaisch-polyn. Sprachen*. 2. Abhandlg. Leipzig: Hirzel.

GALENI libellum qui inscribitur *ἑνὶ ἀμφοτέρω τέρφεσι καὶ φιλόσοφος* recensuit et explanavit J. Müller. Erlangen: Deichert.

GOLDZIEHER, J. *Beiträge zur Geschichte der Sprachgelehrsamkeit bei den Arabern*. iii. Abu-L-Husein Fâris. In Comm. Wien: Gerold's Sohn.

HALL, Fitzedward. *Modern English*. Williams and Norgate.

HEINZEL, R. *Geschichte der Niederfränkischen Geschäftssprache*. Paderborn: Schöningh.

KAUFMANN, G. *Ein Missverständniss des Tacitus*. Strassburg: Schultz.

MAAS, C. *Vocales in stivipium terminationibus positae nominum italicorum, graecorum, imprimis vero germanicorum post quas potissimum consonas in singularis nominativo praeierint quaeritur*. Leipzig: Barth.

MAEHLY, J. *Observationes de Drusi atque Maecenatis epicediis deque Taciteo dialogo critico*. Basel: Schneider.

MEYER, G. *Die mit nasalen gebildeten Praesensstämme d. griechischen mit vergleich. Berücksicht. der andern indogerman. Sprachen*. Jena: Mauke.

MOMMSEN, Th., und G. STUEDEMUND. *Analecta Liviana*. Leipzig: Hirzel.

SURINGAR, W. H. D. *Erasmus over Nederlandsche Spreekwoorden en spreekwoordelijke Uitdrukkingen van zijnen Tijd, uit's mans Adagia opgezameld en uit andere, meest nieuwere Geschriften opgehelderd*. Utrecht: Kemink & Zoon.

WINKLER, J. *Allgemeen Nederduitsch en Friesch Dialecticon*. Haag: Nijhoff.

ERRATA IN No. 84.

Page 436 (a), 19 lines from bottom, for "Bresslau" read "Breslau."
" 437 (b), 16 " " top " " A. C. Jebb read "R. C. Jebb."
" " (b) 5 " " bottom " " ελῆγ read "ελῆγ."

THE ACADEMY.

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Vol. IV.—No. 85.

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WITH the fifth volume the *Academy* enters at the beginning of next year upon a new phase of its existence. Instead of 480 pages of text a year, it will now publish, in fifty-two weekly numbers, 1040 pages, each of which will contain one-fourth more matter than the old *Academy* page.

Three-fourths of each number of the new *Academy* will be devoted to Literature of the imagination, Travels and Antiquities, History and Biography, and will include regular notices of the Picture Exhibitions, the Music of the Season, and the current Drama, English and French. There will be periodical news-letters on literary, artistic and scientific subjects from the chief capitals of Europe, and from America, and an adequate space will be set apart for correspondence between literary men, jottings of interest, publishers' announcements, personal news, and the like. In all these matters the *Academy* will tell people of all classes who are aiming at the higher culture, what to choose and what to discard, in unmistakable terms and with promptitude.

The remaining fourth part of the periodical will be occupied with scientific matters interesting to a smaller class of readers, but divested as far as possible of all unnecessary technicalities which render them uninteresting or unintelligible to the educated as distinguished from the scientific reader. The various departments of knowledge have now become so minutely specialized that even the scientific man can no longer hope to keep pace with discovery in all directions at once, and beyond the limits of his own peculiar study occupies to a greater or less extent the position of the educated layman or general reader. So that the wants of the small scientific class are in this respect identical, or nearly so, with those of the larger reading public. These requirements vary in different countries and at different periods, and can only be ascertained by actual experience. Our experience during the past four years has been that the scientific matter to be found in the *Academy* has been pitched in too high a key, or at least been presented in too technical a form, to be so practically useful even to the scientific reader in this country and at the present time as it might without any diminution of fulness or accuracy be made. We propose then to ourselves a much more difficult task than we have hitherto attempted, viz. that of making this department

of the *Academy* useful to all, and engaging the attention and interest of all educated persons in the progress of European knowledge.

This department will embrace Natural Philosophy, Theology, and the Science of Language, especially the English Language and Dialects, and the very important and interesting study of Comparative Philology, in connection with the Mythology, Folklore, Manners, Customs, and Institutions of the various races of mankind.

It may be asked, why retain the name *Academy* if the paper is to be so entirely reorganized as to form to all intents and purposes a new critical organ?

We have reorganized the paper because we think that such a critical organ as we have described is wanted. As to the retention of the name, a few words of explanation are necessary.

Very few persons have, we think, understood what was meant by calling the old fortnightly periodical, which we now propose to supersede, the *Academy*.

The word "*Academy*" suggests to most average Englishmen, in the first instance, the idea of a second-rate and pretentious private school. It is also the name of a chartered Institution in London, which has won a reputation for fairness and discrimination in hanging pictures. As the name of this periodical, it appears to have given the impression to some persons that we propose to ourselves to treat of matters exclusively interesting to schoolmasters and professors at the Universities. But in all European languages except the English an "*Academy*" means a *central organ of sound information and correct taste in intellectual matters*. The great French Academy founded by Richelieu has more particularly taken under its charge the maintenance of the purity of the French language. The Academies founded in the principal German Capitals, and elsewhere, in imitation of the French, have laid a greater stress upon the maintenance of correct information in matters of scientific knowledge; and the renowned Academy in France has added to itself special Academies having the same object.

Now it is in the sense in which the word is understood on the Continent, in the sense of a standard of correctness in intellectual matters, that the name was and is still applied to the *Academy Journal*. The great national importance of concentrating the intellectual forces of a country is recognized

everywhere except in England; and this recognition has justified the employment of public funds for the maintenance of the Foreign Academies as public Institutions, and the partial support of their members. And the absence of such an institution in England has had this result, that a larger amount of bad work both in literature and in science passes unchallenged in this country than in any other, standing upon the same level of civilization.

What, then, in other countries is done for learning and science *by means of an Institution* supported at the public expense, we propose to accomplish in this country, not only for these but for all the materials of culture and refinement *by means of a periodical* subjected, after the English manner, to the economic conditions of supply and demand, viz. to keep the reader up to the mark of what is best in the world, to gibbet mercilessly what is bad, and to criticize with sympathetic fairness what falls between these two extremes.

Keeping thus always to the main stream of the best production, we shall have to point to Germany for Science, to France for Art, but to our own country for Poetry and Fiction, for the Literature of Manners and Society, for Travel and Adventure, as well as for those great philosophic ideas which are transforming the mental horizon of mankind.

But there is, we are firmly convinced, no necessary connection between setting up a standard of correctness, and being unintelligible or unattractive to the average reader. It is true that much of the attractive writing in this country is deficient in accuracy, and perhaps no less true, that our own work hitherto has preferred accuracy to attractiveness. Still we believe that it is practicable to unite both these qualities in criticism; and by our elaborate organization of departmental editing, we confidently expect that we shall be able, as we have determined, to unite them in our new issue.

EDITOR.

General Literature.

Memoirs of Sara Coleridge. Edited by her Daughter. King & Co.

MANKIND always have a strong curiosity about the affairs of their neighbours, and a person who for any reason is well known is a neighbour. We are inclined to think that this is the principal reason of the popularity of these interesting memoirs, which have already reached a third edition. Mrs. Coleridge was much more than a representative of the best type of lady-like accomplishment (in the high sense of the word) which prevailed during the first half of this century; if she had been nothing more she would have been forgotten like many others who wrote letters quite as elaborate, and quite as high toned, and very likely as ingenious, to less distinguished correspondents. And yet, although it is the individual distinction of Mrs. Coleridge which attracts the attention of the reader, it is rather what is typical that retains and satisfies it: the combination of refinement, both moral and intellectual, with keen domestic affection and much spiritual earnestness is really what repays him more than any peculiarity of view in the writer, though the letters certainly add to our knowledge of the Coleridgean tradition.

Mrs. Coleridge came at just the fortunate time—when women of the middle class were turning to intellectual cultivation as an outlet from the routine of housekeeping and visiting; before the days of Mudie, when the abundance of books and the increase of leisure have combined to stimulate so many girls into a condition of listless restlessness, because they are under the impression that they have got to find a use for the education which they have received or are trying to give themselves, and cannot be easy until they

have a career. It was career enough for Mrs. Coleridge to be a daughter, a wife, and a mother, although marriage was already becoming difficult, and she had to wait seven years before her cousin was in a position to marry her. Her most important literary labours were devoted to gathering up the fragments of her father's mind; her most successful work was the cheerful verses she composed for her son under the title of "Pretty Lessons," and her only original production, *Phantasmion*, is really in substance a glorification of the Lake Country, for which her affection was even stronger than her admiration. Indeed her intellect was so completely the servant of her affections, especially her family affections, that one fancies that she might have lived contented, though inglorious, even if she had not been the wife of one Coleridge and the daughter of another and a greater, for certainly she was much more free from personal ambition than most writers with a tithe of her talent and attainments.

Perhaps some readers will be left under the impression that this supremacy of the affections was more favourable to the development of her character than to the play of her intellect. Here, for instance, is a passage of a kind of which we should have been glad to meet more:—

"The substance of what pleases you in Abercrombie, I have lately read in Chalmers's Bridgewater Treatise; and, oh! when the wordy Doctor does get hold of an argument, what a splutter does he make with it for dozens of pages. He is like a child with a new wax doll; he hugs it, kisses it, holds it up to be admired, makes its eyes open and shut, puts it on a pink gown, puts it on a blue gown, ties it on a yellow sash, then pretends to take it to task, chatters at it, shakes it, and whips it; tells it not to be so proud of its fine false ringlets which can all be cut off in a minute, then takes it into favour again; and at last, to the relief of all the company, puts it to bed."

After this the writer goes on to hope that her correspondent may have time to learn Greek, "because that language is an *idea*. Even a little of it is like manure to the soil of the mind, and makes it bear finer flowers." The latter reflection is stimulating and perhaps instructive, the former is only amusing; and though Mrs. Coleridge felt it her duty to her children to cultivate her powers of enjoyment in the early days of her widowhood in order that she might be able to live, she never seems to have been led to cultivate her powers of giving amusement as she might have done if she had taken the advice given her to "turn her mind out to grass." In fact her natural seriousness was deepened by her being brought up with Wordsworth and Southey, and by being left in charge of her father's memory, first with her husband and then alone, till she became an ardent and convinced though independent disciple. Perhaps this in itself was an intellectual misfortune; it led her not to exaggerate but to misconceive her father's philosophical importance. He opened two new lines of speculation both fruitful though divergent, and he spent himself in waiting at the point of parting and beckoning passers by to look down the magnificent vistas; if he had had energy to follow either he would have found that it was impossible to follow both. Probably during his lifetime this stationariness did not detract from the efficacy of his influence, but it was different when his daughter tried to recall another generation to the starting point as if it were a resting place. And this attempt to give a factitious finality to the system which Coleridge never expounded in its completeness, and probably never elaborated, did not preserve the author from an inconsistency which becomes more and more apparent in the later letters. The whole criticism of Tractarianism proceeds upon the assumption that the mind's ordinary way of thinking upon high subjects is applicable to the highest, and this is even reinforced by the assertion that *a priori* intuitions, such as the impossibility of the existence of evil spirits, are to override all external authority, since the authority itself only rests upon the intuitions it satisfies. So

far so well; but if the ordinary way of thinking is to be paramount, why is the ordinary way of wishing to be so completely overruled? and yet this is assumed in all the criticism of rationalism and worldliness and poor Keats' neopaganism. The fact is that the same course of conduct which destroyed Coleridge's naturally weak will fostered a temper which made it seem natural to sacrifice wishes, and this was strengthened by the habit of self-reproach: and his daughter, who had little or nothing to reproach herself with, accepted the inheritance of her father's penitence.

Her criticism of Keats is not the only instance of one-sidedness. She was certainly a good deal less than just to Mrs. Hemans, while she was a good deal more than just to Joanna Baillie; a really trained critical perception would have discerned the hollowness of the pretensions of a poetess who judged so ill of poetry, and a perfectly liberal criticism would have recognised Mrs. Hemans' real grace and delicacy of feeling in spite of the absence of original thought: Mrs. Coleridge preferred to say that Mrs. Baillie was a poem in herself, and that Mrs. Hemans' manufacture could be distinguished from that of other writers as a room furnished by Jackson might be distinguished from a room furnished by Gillow.

En revanche she characterises with a great deal of force and truth, though perhaps with hardly enough severity, the contrast between Wordsworth's earlier and his later manner, and perhaps she is the only writer who has resisted the temptation to overpraise "Laodamia": the criticism, which is too long to extract, is certainly keen and subtle, though confused by over-eagerness; but one feels Mrs. Coleridge is not quite without ground for saying: "In this poem Mr. Wordsworth wilfully divested himself of every tender and delicate feeling in the contemplation of the Wife and the Woman, for the sake of a few grand declamatory stanzas, which he knew not how else to make occasion for."

The correspondence with Aubrey de Vere, from which the above is taken, may strike some readers as rather depressing on the whole: the writer seems stationary while the world is moving, she seems attached to her opinions out of proportion to their importance. She insists and explains, and she does not convince, and one wishes she could have agreed to differ at first instead of at last: and though her theological acquirements were more than respectable, she lays down the law on such points as St. Augustin's view of baptismal regeneration and Eutychianism in a way that shows a total failure to apprehend the historical context of the books she read: consequently she was as completely as Dean Stanley at the mercy of the fallacy that every opinion is orthodox till it is condemned by an ecumenical council.

It is a curious question whether her intelligence and laboriousness could have been directed so as to produce more result for others: for herself it produced the high-strained consciousness of a well spent life, which posterity has been content to admire without asking the Preacher's question which Mrs. Coleridge never asked of herself, "Why was I then more wise?"

G. A. SIMCOX.

Oesterley's *Gesta Romanorum* and *Johannis de Alta Silva Dolopathos*. [*Gesta Romanorum*. Hrsg. von Hermann Oesterley. Berlin: Weidmann. *Johannis de Alta Silva Dolopathos, sive de Rege et Septem Sapientibus*. Hrsg. von Hermann Oesterley. Strassburg: Trübner.]

It is well known that there are few works which occupy a more important place in the history of the fiction of the Middle Ages, and even of later times, than the former and part of the latter named collection, forming the subject of this notice. Their most recent editor, Dr. Oesterley, formerly *custos* of the Library at Göttingen, and now of that at Breslau, is already well known to the learned world

by several excellent works, and especially to Englishmen by his edition, accompanied by valuable notes, of *Shakspeare's Fest Book* (London, 1866); and he has now given a new proof of his learning and untiring research. With regard to the *Gesta Romanorum*, they have long been the subject of investigation, and yet the very complicated questions as to their origin, home, age, and author or compiler, had not been satisfactorily solved, and indeed still remained surrounded by impenetrable obscurity. No one in fact had adopted the only right method of solution, namely, a close comparison of all attainable manuscripts with each other; and only one *savant*, Sir Frederick Madden, had undertaken a part of this task, and given a general description of the manuscripts to be found in England. Even he defends the supposed existence of a peculiar Anglo-Latin text (in contradistinction to a continental one), but he declares emphatically that a final decision on the above-named questions is only attainable by the way I have mentioned. The uncommon difficulties with which this task is surrounded are very obvious, and Oesterley, for attempting to deal with them, is entitled to all acknowledgment. All the more must we regret that, in spite of his *improbis labor*, he has not succeeded in dispersing the darkness which hangs over the author as well as the antiquity and home of this collection, though he has shown that in its original form it probably came into existence about the end of the thirteenth or at latest the beginning of the fourteenth century, and according to all appearance first in England. He relies for proof of this especially on the names of dogs occurring in the Vulgar text (p. 142), *de diaboli laqueis quibus nos multipliciter circumvenire satagit*, which are all recognisable as English, and some of which have remained in use till recent times. Only he has failed to explain the name *Emulemin*, though according to his opinion this also would seem to be of English origin. Oesterley is plainly in the right, I think, for the manuscripts give the name in the form of *Ewylemin*, and this is nothing else than *Away, leman*, like another of these dog-names, *Beamis* (old French=*beau amis*), which answers to *leman*, and is not derived, as Oesterley supposes, from *Böhmen* (Bohemia). Further on, Oesterley shows that the whole collection was originally taken from a selection of tales from Roman history, or rather from Roman historians; that they had been long gathered together for use in sermons or moral disquisitions, and sooner or later became known by the designation of *Historia*, or *Gesta Romanorum moralizata*, or some similar title. Whether this first version of the work consisted exclusively of such extracts from classical writers, or whether these extracts were originally united with a series of later tales and parables (*quædam alia*), cannot now be ascertained. This much is certain, that from a very early period collections of extracts from the later Roman writers were known and designated as *Gesta Romana* or *Romanorum*, and that the work before us took its rise from the adaptation of such a collection to moralising purposes; and to this moral part of the work belongs its special character and individuality. How from such a groundwork has arisen the endless variety of manuscripts of the fourteenth and fifteenth centuries, these manuscripts themselves are the best sources of information. First, parables, easily admitting of a spiritual interpretation, were inserted or subjoined; then, according to circumstances or inclination, extracts that had been modified and made fit for *moralisation* were added, and at last tales were selected, often ignorantly enough, solely for the sake of their spiritual meaning. Oesterley points out what works were used in preference for the enlargement of the original collection; but among these the *Moralities* of the Dominican Professor Holcott, who died in Oxford in 1349, ought scarcely to be counted, for the pieces hitherto regarded as possessing the

characteristics of his style are found to exist in a manuscript of the *Gesta Romanorum* of 1342, here indicated for the first time. On this as well as other grounds it is clear that the supposition of an independent Anglo-Latin text is untenable, and that the English version can only be counted as one of the branches of a widely spread family of manuscripts.

Beside the results of Oesterley's researches which I have here briefly indicated, his work contains a very complete account of almost all the manuscripts, the greater number of which, amounting to about 160, have been examined by himself; then the text of the three first Latin editions which appeared between the years 1472 and 1475, and contain 150 (151) chapters; along with the chapters 152 to 181, which were added in the third impression; beside these, the chapters belonging only to the German translation (Augsburg, 1489) are given in an appendix in the original Latin; and lastly all the pieces of the Latin manuscripts not hitherto known in their original language. The book concludes with very full and valuable information on the sources and the literary diffusion of all the stories contained in the *Gesta*, and a very welcome index, so that in point of completeness the work leaves nothing to be desired, while it has cleared away nearly all the obstacles in the way of further researches.

We now come to the second work standing at the head of our notice, the *Dolopathos*, which is a peculiar development of the widely known *Seven Wise Masters*. Till recently the work was only known in the French translation, of which a *trouvère* called Herbers was the author, between the years 1223 and 1226, who ascribes the Latin original to a monk of the Cistercian Abbey of Haute Seille, in the diocese of Toul, named Dam Jehan. So long as this original was not to be found, it remained uncertain whether the translator had been faithful to it, or whether he had permitted himself any alterations, and if so to what extent. These questions had been long agitated, but without any result, till in the years 1864 and 1867 Professor Adolph Mussafia, the eminent Romance scholar of Vienna, discovered three manuscripts which contained the history of *Dolopathos* in Latin prose. He published his discovery, with a very learned introduction, in the *Memoirs of the Vienna Academy*. As, in spite of all their agreement with the French *Dolopathos*, the three Latin manuscripts and a fourth afterwards discovered by Oesterley still varied from it in many important particulars, it was still possible that they might not contain the original work of Dam Jehan, but only a modification of it or a prose adaptation of the French poem, especially as they all belonged to the fifteenth century. However, at Oesterley's instigation, Dr. Schrötter, Librarian of the Luxemburg Athenaeum, has made a successful search, and discovered a manuscript of the thirteenth century, containing the Latin *Dolopathos*, and agreeing with the old French poem in every particular, so that we at last possess the original. Of this original, which he attributes to the year 1184 or 1185, Oesterley gives the *editio princeps*, accompanied by a careful introduction respecting the history and subject-matter of the work.

It is particularly to be noticed that, according to Dam Jehan's own declaration, he got his subjects from the mouth of the people, and that what he thus received he has set down faithfully in his work, from which it follows that all the tales were current orally, at least among the people in France, by the second half of the twelfth century, and consequently must have found entrance far earlier; so that the idea of literary sources for the monk of Alta Silva cannot be entertained, not even for the framework of the story, as with regard to a western version of this, in the twelfth century, we have as yet no information.

Of the eight remaining tales, three only resemble others in

the *Seven Wise Masters*; without being taken however from that collection, but rather, as has been said, derived from the people, like the other five.

There is little trace of the direct influence of the Latin *Dolopathos* upon the development of the kindred branches of literature; but according to Oesterley, the indirect influence of Herbers' French translation is more important, as much of the subject-matter, which had been originally derived from the people, was through it brought back to the people's knowledge in ever widening circles. The means by which this general diffusion was effected were the poems of the French *trouvères* which made their way through England, Italy, Germany, the Netherlands, Hungary, Russia, and even into the Asiatic steppes. Our acquaintance with popular poems, legends, and tales has lately been greatly increased, and some of these, from nations both near and remote, bear so striking a resemblance, either in whole or in part, to numerous isolated but most characteristic features in the tales of *Dolopathos*, that we cannot doubt that this work had some influence on their origin or development.

This fact affords a new proof that the great stream of living popular fiction which poured from East to West, was followed by a less powerful counter-tide which has carried these traditions back again far into Asia. The *Dolopathos*, as Oesterley remarks, will always be one of the most important and instructive memorials of this fact. I cannot deny, however, that this supposition of a returning tide of tradition, and especially one reaching far into Asia, must be treated in each particular case with the greatest caution, though its general existence may be admitted. In any case, the importance of the *Dolopathos* in reference to literature is very great, and Oesterley in making known the original has rendered great service to learning. As regards the literary references and parallels of the several tales, they have been given before, partly by others, partly by Oesterley himself in various places (such as the *Gesta Romanorum*), and he has contented himself in general with referring to these, though he has added many supplementary notes.

FELIX LIEBRECHT.

Outlines of German Literature. By Joseph Gostwick and Robert Harrison. Williams and Norgate.

It is more than forty years since Mr. Taylor, of Norwich, published the concluding volume of his *Historic Survey of German Poetry*, and during that time perhaps no one year has gone by, during which somebody has not endeavoured to enlighten us by telling what he thought about the German language and the books written therein. The works of these writers, however, turn out on examination to be for the most part mere trade speculations, unworthy of regard except so far as they may be useful to examiners or the poor youths about to undergo the tortures such persons are retained to inflict. The *Outlines* before us is not a work of this class, but really what it professes to be, an account of a great literature written by those who are familiar not with the language only, but with the thoughts of many of the men who have made the knowledge of what our forefathers called the "High Dotche" tongue a matter of necessity for all persons who desire culture.

It is surprising that a really good book of this kind has not been published years ago. It is to be accounted for, we think, by the fact that among the thousands of our countrymen and countrywomen who profess to know something of German, the greater part have learnt it merely as a frivolous accomplishment, and a large section of the rest only care for it so far as it helps them to understand more fully the one or two subsections of knowledge in which they take

a living interest. A taste for literature as distinct from a fondness for reading novels, in prose or verse, is a rare endowment, and the literature of another people, however close the kinship may be, presents many difficulties even to those who have thoroughly mastered the grammar and vocabulary. There is but one serious fault to find with the book before us. It is so well done throughout that we cannot but be angry with its authors that there is not more of it. The condensation has been far too rigorous. It is impossible to survey German literature from Ulphilas to Dr. Döllinger within the compass of 581 small octavo pages, and we do not think it was wise that such an attempt should be made by authors who if they had given themselves room enough would have been able to do the work in a manner so eminently satisfactory. The ground-plan is however mapped out, and, except in certain minute particulars, little is required beyond enlargement.

By far the best parts of the book in our opinion are chapters ii.-vii., which treat of the literature of the Middle Ages. Here much of the information given is new in an English dress, and if we mistake not, even well-instructed Germans who have not made the literary history of their country an especial object of study will find many things interesting to them. There is a strange contrast between the mediæval popular literature of Germany and that of England. Here, though nobles and gentlemen were subjects of satire, the virtues of high birth and the rank commonly attendant thereon were always recognized. Nor until the democratic movement of the last century had been long prevalent in drawing-rooms, did the people consent to hear patiently stories in which such things were set at naught; and even now, if we may judge by the tales that are most read in the farm-house kitchen and by the peasant's fireside, accounts of the loves of highborn maidens and the marvellous beauty of duchesses are far more popular than the narratives by which some politicians would be glad to supplant them.

The old English popular literature is profoundly aristocratic in its tone. The vices of all sorts of people are lashed unsparingly; but the lord, the knight, or the gentleman is almost always, whatever his character, held to be something better worth thinking of than the yeoman or the churl. In *Chevy Chase* it is the doings of the men of knightly lineage that are recounted. In the *Blind Beggar's Daughter of Bednall Green* the climax is not reached until the fair heroine is not only well married and richly dowered, but is also proved to be of the highest possible Norman lineage:

"A grave, a grave, Lord Barnard cried,
To bury these true loves in;
But lig my ladie on the upper side,
For she came of the nobler kin"—

is the keynote of our popular legends.

In Germany this was not so. There the cruelty, and still more the rapacity of the lords, uncontrolled by any strong central authority, had branded into the hearts of the people a feeling of suffering and wrong unlike anything we have ever known. Instead of the loving tenderness of England and Scotland, there is in the old German literature a stern dark feeling of hate which shows itself by attributing to the "upper classes" all the darker crimes by which our common nature is subject to defilement.

Speaking of the comic literature of what the authors call the third period, that is 1350-1525, they tell us truly that "the chief objects of the satires are the clergy and nobility; but the wealthy townsmen are not spared. The peasantry are mostly allowed to escape easily." English literature is rich enough in anti-clerical fiction, but there is much more of it in the older German than in the English of

a corresponding date. Before the storm of the Reformation it would seem that the priesthood were much more unpopular in Germany than with us. The whole of this chapter on the old comic and satirical literature is very valuable. Among the stories quoted as specimens of what was once considered humour is the following:—"A parish priest is described so fatuous, that he cannot remember the days of the week. To help his memory, he makes on every week-day a birch broom, and by placing his six brooms in a row, and frequently counting them, he knows when Sunday comes, and prepares to read mass. A wag steals away the broom that should mark Saturday, and on Sunday morning the priest is found making another broom instead of going to church."

The fun of the thing does not seem very racy to us, but the tale has an interest beyond whatever little humour there may be in it. The very same story is popular to this day in England, and as we believe in Wales also, only in our version the priest makes baskets, not brooms, and he was not a fool, but a drunkard who had spent Saturday at the alehouse and therefore neglected to make the sixth basket.

Though there has been no lack of attention, the authors have thought fit to be more concise in treating of modern German philosophy than in the other parts of the volume. We have said before that we are sorry for this conciseness, but here it is not so much to be regretted as elsewhere, as philosophy is a subject to which it is impossible to do justice in a book of outlines, however much extended. What is said is very well put, and nothing could exceed its general fairness. See for example the paragraphs about Arthur Schopenhauer, a man concerning whom most Englishmen who have heard of him think they have the jester's privilege of talking without taking thought.

It is in the parts that relate to historical literature that the heavy pressure of condensation has reached its *maximum*, and here perhaps we really want light more than on any other branch of the subject. If the authors would give the English reading public a guide to German historical literature, they would confer a great boon. We are sure from what we have before us that if they undertook such a work it would be well done.

EDWARD PEACOCK.

LITERARY NOTES.

Mr. Austin Dobson, the author of *Vignettes in Rhyme* (H. S. King and Co.) has judged himself out of his own mouth: he says in a poem in which *Une Marquise* is taken to task with considerable severity.

"We have passed from *Philosophe*—dom
Into plainer modern days,—
Grown contented in our oafdom,
Giving grace not all the praise."

His own words explain the limits of the excellence which may still be attained by writers of *Vers de Société*, of whom Mr. Dobson is among the best, only second, if second, to Mr. Locker, who still finds a large public even in these dull days to derive amusement from his fancy. The fact is that if a man with an habitual conviction that jesting can under no circumstances be the business of life, finds that after all his own most valuable faculty is jesting, he is likely to exhibit a certain want of energy in the exercise of that faculty. Delicacy without insight, lightness without gaiety, smoothness without ease, melancholy without tenderness, reflection without wisdom, is all that we can expect under these conditions; and this is what Mr. Dobson gives us at its best, with a sort of accomplished fluency that is pleasant in itself, and produces a kind of agreeable distraction in the reader which bears about the same relation to merriment that ice cream soda bears to champagne. He has a great affluence of well assorted detail that is about as likely to catch our

interest as a well arranged curiosity shop, and deserves it about as well; though of course if life were really well, that is to say pleasantly employed, nobody would care to look at *bric à brac*, or to read this sort of gossip about it,—

"This was the matter of the note,—
A long forgot deposit,
Dropped in an Indian dragon's throat,
Deep in a fragrant closet;

Piled with a dapper Dresden world,—
Beaux, beauties, prayers, and poses,—
Bonzes with squat legs undercurled,
And great jars filled with roses."

These stanzas are taken from a poem called "A dead Letter," about an eighteenth century girl who made love to an eighteenth century young man: there is a good deal of the same kind of thing, that is a little too flippant to be tender, and a little too airy to be quite prosaic. "A Revolutionary Relic," though it seems as independent as the rest, is full of curious coincidences with one of Longfellow's manners, probably because the constraint of double rhymes has had the same effect on both. Here are the first stanzas:—

"Old it is and worn and battered
As I lift it from the stall;
And the leaves are frayed and tattered
And the pendant sides are shattered,
Pierced and blackened by a ball.

'Tis the tale of grief and gladness
Told by sad St. Pierre of yore,
That in front of France's madness
Hangs a strange seductive sadness,
Grown pathetic evermore."

Here is a stanza from "The Story of Rosina"—a fruit-girl with whom Boucher almost fell in love, and who died of his desertion of her—which is a pretty enough description of his work under the influence of his ordinary *amourettes*:—

"Her Boucher served till Nature's self betraying,
As Wordsworth sings, the heart that loved her not,
Made of his work a land of languid Maying,
Filled with false gods and muses misbegot;—
A Versailles Eden of cosmetic youth,
Wherein most things went naked, save the Truth."

"Lydia Languish" is a not unworthy pendant to Praed's "My own Araminta say No," though Praed's generation was much higher spirited than ours. "The Peacock on the Wall" is less successful; it recalls without by any means equalling Lewis Carroll's really humorous ballad of the "Popinjay" in *Phantasmagoria*. "Before Sedan" is a rather tame echo of Hood's sentiment, and there are seven poems towards the end that show that Mr. Dobson could be if he pleased a creditable camp-follower of the neo-mediaeval school. "The Virtuoso" is a neatly turned portrait of a subhumorous egoist; "An Autumn Idyll" is a really sprightly burlesque of the *Eclogues*, and there are a couple of Odes of Horace pleasantly diluted.

Captain Bedford Pim, R.N., is an ardent enemy of Prussia and an enthusiast for Napoleonic ideas; these tendencies lead him to emphasize much that is now nearly forgotten, and so make his *Chronicle of the War between France and Prussia* (Provost and Co.) less tedious without making it less trustworthy, though a severely impartial reader might object that the partisan sympathies of the writer lead him to obtrude comment and emphatic detail in a way which disturbs the perspective of events.

Mr. Henry Sewell Stokes has been making verses, or as he calls them poems, for more than forty years now, and his *Poems of Later Years* (Longmans) show that he might have been worse employed. "The Chantry Owl" has some really amusing fancy (in part iii.) as to the birds that different authors may turn into, and the places they will haunt; and "Feeble and Old," and "So have I," and perhaps even "Life," deserve a place in second-rate anthologies. As much may be said of "Music," "I Keep my Kisses for my Wife,"

and perhaps "Sister Therese," in Godfrey Egremont's *Poems and Songs* (Provost and Co.).

Apropos of anthologies, the Rev. Francis Jacox has with practice become very nearly a perfect bookmaker; in his early works he gave us a little too much of himself, and his reflections were on a level with A. K. H. B.'s. At present he has attained the art of constructing almost perfect patchwork out of his reading: he is certainly the benefactor of all who have the wish to read and have not the will or power to read much; and even people who read a good deal will often be grateful to him for having read for them books they might be too proud or too lazy to read and remember for themselves. *At Nightfall and Midnight* (Hodder and Stoughton) treats copiously of such topics as Noctambulism, Night Students, The Looks of the The Last Sleep, and the like: we feel that the author's commonplace book, or one of his commonplace books, is being poured out on us, and wonder to find it so well filled, and that the contents flow so equably. It is curious that the author cites Macaulay's lyric on "The Last of the Buccaneers," not Kingsley's.

There was a certain union of tenderness and acuteness in Mr. Birks' *Victory of Divine Goodness* which made it possible that future works of his might deserve attention. His *First Principles of Moral Science* (Macmillan) go far to show that the distinction of one work was due to the painful interest that a special subject had for the writer, and that where he feels no anxiety it is natural for him to expatiate in flowery solemnity and pompous plausibility without any distinction at all. Mr. Birks assumes without analysis the ostensible moral notions of the present day and the current moral phraseology, and of course this supplies him with a canon for the condemnation of all systems which do not make the same assumption. His mathematical training enables him to freshen up the old objection about the calculations which utilitarians are supposed to be called to make: and his lecture on morals and political economy is sensible, and succeeds (with the help of M. Play) in saying a good deal that Mr. Ruskin has lately been trying to scream. Mr. Birks has reprinted a prize essay on Mathematical and Moral Certainty which proves conclusively that forty years ago he was if possible more flowery, decidedly more fluent, and quite as profound as now. He discusses with two of his predecessors, Dr. Whewell and Mr. Maurice, the important question in what sense he is a professor of casuistry: meanwhile it is not surprising that the Moral Philosophy Tripos is as unpopular at Cambridge as the school of Natural Science at Oxford.

We have great pleasure in recommending to the attention of our readers the *New Shakspeare Society*, a prospectus of which we have received. According to the proposals of its founder and director, Mr. F. J. Furnivall, its work will be twofold. First, at the meetings of the Society, which are announced to commence in March next, short papers will be read, to be followed by very full discussions, on the most important points of Shaksperian criticism. The chronology of Shakspeare's plays, the great periods of the Poet's work, the state of the text and value of conjectural emendations, the pronunciation and spelling of the English of Shakspeare and his contemporaries, are among the subjects to be thus treated. Secondly, the young Society will resume the work, so admirably carried on by its predecessor, of publishing a series of texts illustrative in various ways of the Plays and Poems of Shakspeare, the social characteristics of his age, and the history of the English drama; and it is proposed to add a Handbook for Learners and a scholarly and adequate life of the Poet. The *New Shakspeare Society* already includes the names of many of the most eminent Shaksperian scholars in all parts of the world, and we hope that it will receive that large measure of support which it will most assuredly deserve. The subscription is fixed at a guinea a year.

Messrs. Rivington have just issued the first volume of their series of "Historical Handbooks,"—*The English Institutions*,

by P. V. Smith, Barrister-at-Law; the second volume, *The History of French Literature*, will be ready at the end of January. They also have in the press a continuation of Thucydides, Books 3 and 4, by G. A. Simcox, forming one of the *Catena Classicorum*; a *Manual of Building Construction*; a *Key to Hamblin Smith's Algebra*; *Algebra Part II.*, by E. J. Gross, M.A.; a Greek Grammar by Evelyn Abbott, and *Campaigns of Napoleon—Jena and Waterloo*, by E. E. Bowen.

Art and Archaeology.

MR. HOLMAN HUNT'S NEW PICTURE.

THE "Shadow of Death" may be considered in three lights—as a painting, as a picture, as a sermon, for we are assured on authority that it was "painted in the conviction that Art, as one of its uses, may be employed to realise facts of importance in the history of human thought and faith."

As a painting it is beyond praise: the heroic realisation of every detail is carried far enough to convince us, if it were possible, that it was worth four years of the prime of a great artist to form and paint a collection of carpenter's tools not only Eastern but ancient, and a saw with the teeth turned upwards, and hundreds if not thousands of shavings, and a tressel of a form common in the East and still to be found in Italy, with the same devotion as the sunset sky and the rosy hills of Galilee, which are seen through the open arch in which the principal figure stands relieved against the sky: the spectator should on no account omit to notice the really lovely quality of the shadow of the tressel on the shavings.

And as a picture? A picture can hardly be judged without appeal except by the consent of painters: the kneeling blue-robed figure turning startled from the half-open casket is full of literal homely life, and yet has a splendid learned grace besides; the red fillet on the floor, the open sky beyond, the tawny sinewy figure in the middle, the pomegranates on the window-sill are all things that it would have been pleasant to see together in the sunlight just as they happened to come, and Mr. Hunt paints far too powerfully to weaken their pleasantness in the least: and yet—though it is hard to paint a pleasant sight as Mr. Holman Hunt can paint it—we hardly feel that we have been helped to make the great step that separates pleasant sights from a picture, and after all this is as great as the step which separates a pleasant noise from music: and again it is easier to feel sure that the picture has been painted *in* Eastern sunshine than that it is a picture of Eastern sunshine.

And as a sermon, as a sacred poem upon canvas? that will be the principal thing for most spectators—one feels sure it has been the principal thing for the artist; if it is right to speak of the picture at all it must be right to speak of this. We are told that "one of the problems of our age concerns the duty of the workman; His life, as now examined, furnishes an example of the dignity of labour." Well there can be no doubt, whatever we think of the subject, that the picture itself "furnishes an example of the dignity of labour." For many this will be enough; they will ask nothing better than to believe in the sacredness of what is put before them with such loving patience, with such clear intensity, with such sustained unwavering conviction.

It has been said that the kneeling figure of the Mother is in itself beautiful and masterly; but why are the bare feet white with dust? has she been out to draw water? was there no one to do this for her, that she might keep the seclusion which is the ideal of Eastern womanhood unbroken? Then is the periodical inspection of the Wise Men's Offerings precisely an ideal "aid to faith"? and to come to minor points, is there the slightest reason to think that there was ever a crown made half way between the diadem of the Herods and the tiara of the Parthian or Sassanian dynasty? But beautiful as it is, the figure of the Mother is secondary; even the symbol of the crucified shadow with one of the hands falling so that a nail in the tool-rack comes just in the middle is secondary too, and as for the tertiary symbols with which the picture overflows, they are at best a kind of Sunday puzzle for child-

ren of a larger growth. One must judge the work as a whole by the face and the figure of the Carpenter, whose uplifted hands cast the Shadow of Death upon the wall behind. There is a deliberate and of course quite defensible rejection of all academical idealism, and yet the very thoroughness of grim realism leads the artist to an idealism of his own—there is something half superhuman in a nearly naked figure so articulate throughout as the artist's method requires. Then there is a pathetic truth in the attitude, with the fingers still cramped by the day's work. The face is raised and thrown backward; it is surrounded by a tangle of chestnut hair and beard, a little matted with the burden and heat of the day (this makes us ask if the flesh of the body is not too dry?), and deep blue liquid eyes. The expression is intense at any rate, only it would be perfectly accounted for by supposing the Carpenter to feel keenly for Himself and for His brethren the mere hardness, weariness, narrowness of the mortal lot He bears so patiently—and hereupon appeal to heaven and earth for sympathy. If the artist intended to ask for compassion, respectful compassion, he has not asked in vain; but a spectator may ask in return, Is mere sacred Carlylese self-pity an adequate motive for a religious picture, for a picture of the central figure of a great religion? to come to lower ground, is this worthy of the spiritual power of the painter of "The Light of the World," of the intellectual power of the painter of "Christ in the Temple," where the ingenuity is still dramatic as well as hieroglyphical?

The painter seems to have carried out his conception completely with unparalleled devotion, with indefatigable energy, with conscientious austerity: it is sad that conception should be so soft and poor: the first thought the picture suggests (it is some time before the strangeness lets one think) is "Carlo Dolce realised"; if Carlo Dolce can be realised, Mr. Holman Hunt has come to be the man to do it: would this be a gain? the Christs of Carlo Dolce were at least conventionally divine. G. A. SIMCOX.

THE WINTER EXHIBITION OF THE SOCIETY OF BRITISH ARTISTS.

ONE always knows what to expect in Suffolk Street—a wide expanse of comfortable pleasantness that disdains curiosity and fears aspiration, hundreds of pictures one would not be sorry to see on the walls of acquaintances and a few that one would be glad to see on the walls of friends, a few contributions by people who can exhibit elsewhere, and a great many from those who have an excellent right to exhibit there.

Perhaps we may speak first of the two things that are least like what we had the certainty of seeing: one is 778 (H. Bright)—

"Returning victors from the field of fight,
Our gallant frogs present a gala sight."

The frogs take up all the picture and are carefully drawn, and act human beings with humour enough on their hind legs: the other is 568, "Wells Cathedral—a frosty morning" (A. Parsons).

Of the ordinary poetry of sunset and sunshine there are many examples; one may quote "Stoke Bridge," 10, by A. Clint, and 45, "Rydal Mere," by T. Peel: in a quieter vein we have "A Bright Morning after Wind"—not very bright—by H. Moore (84). "A View in Italy," W. Tennison, 498, and "Harvest Time on the South Coast," W. Gosling, 508, would make capital chromo-lithographs. But lithography would hardly do justice to G. Hartley's "Early Morning," 560. Miss Mortalba's "Il giardino publico," 28, is worth notice because the sea and sky look as if they had been painted a good many years ago, and the trees look as if they were hardly quite painted yet. Of figure subjects the most conspicuous are Mr. Bauerle's "Children," 156, 492, 566, with a kind of smoky grace which is one aspect of children in real life, only Mr. Bauerle reproduces it at the expense of representing his children as made of smoke altogether. One may notice besides Mr. Bromley's "Early Lessons" (89), some men sitting drinking and playing, while one is fencing with a boy; "An Undoubted Original," E. Hughes (127), two connoisseurs looking at a new purchase; "A Street Ballad," by W. J.

Henessey, 107; "On Guard," J. T. Nettlehip, 257. If space and patience held out, one might mention many more all in a way well deserving "fortemque Gyan fortemque Cloanthum." G. A. SIMCOX.

THE THEATRE.—"THE ROAD TO RUIN"

THE newspaper notices of *The Road to Ruin* have perhaps scarcely as a whole done justice either to the piece or its performance. At all events one may venture to hold a somewhat higher opinion of both than that which has been generally expressed. At the Vaudeville, Holcroft's comedy—the only one of his thirty plays that has survived to our day—followed upon four hundred consecutive representations of *The School for Scandal*; and what test can be more severe than that of juxtaposition with Sheridan's unwearying *chef d'oeuvre*? As literary work, it is of course impossible to make comparisons between the two, but the more cultivated of our play-goers are likely rather to under-rate than to over-rate the merits of *The Road to Ruin*—merits of a kind which in the literature of the imagination are not just now in fashion. The piece is remarkable for bristling incident and for robustness of conception. The plot is firmly and ingeniously knit, and might in other hands have served to display and develop a group of more original and interesting characters than it was within the scope of Holcroft's art to embody. To a modern mind, the faults lie on the surface. First, there is poverty of invention as regards the characters, of whom one only—that of Goldfinch, the amateur coachman—was at all new; and he, be it remembered, was a mere untouched study from nature: valuable, no doubt, and amusing, for his truth to a contemporary hobby of high life, but wholly superficial, and in no sense to be accepted with the character-studies of such artists as Sheridan and Goldsmith. Secondly, there is the complete absence of literary grace and charm. The dialogue is never better than smart. From beginning to end there is not a brilliant line, nor a beautiful one. But it is sometimes funny and often effective: the work apparently of a writer who did not aim high, but who had the good fortune to know, precisely, that at which he was aiming, and the experience required to hit it without fail. And thirdly, the absence of most good qualities of style is not atoned for by the introduction of catch-phrases—such as the "that's your sort!" which Goldfinch says a score or so of times—phrases to which age cannot impart wit, and which have place enough allowed them if they are tolerated in farce and in burlesque. But, these deductions made, there remains, as has been indicated, a robust work, full of movement and interest—interest more in the thing now passing than in the end which is to come—and to the acting of this work there are attached countless traditions, so that the players find themselves the inheritors of ready-made parts, which it is undoubtedly their business to alter and improve as they can.

Our generation has seen Charles Mathews as Goldfinch; and, in it, it has not seen him at his best. He was lighter, he was more mercurial, than Mr. David James; yet I doubt if he were better-humoured, and feel sure he was not so absolutely "horsey." The most sympathetic character is that of Dornton, the fond yet hardly feeble father of the good-natured scape-grace who stands for hero. Mr. William Farren looks the part quite perfectly—following, one imagines, pretty closely in his father's steps, and certainly presenting us with such a benign and restful and highbred face as might look out upon us from the canvass of Reynolds. His performance is not one in which there are special moments to notice. It is beautiful and dignified. It is finished and harmonious: seemingly without effort, and happily without fault. Young Dornton is represented by Mr. Charles Warner, with an amount of force and of feeling with which those who saw him, only a very little previously, in his colourless rendering of Charles Surface, are all the more delighted because it is distinctly a surprise to them. He is good in the earlier scenes; judicious in that most difficult and it must be said also most repulsive scene with Widow Warren; and best of all in that scene with his friend, when, half lost with disgust and despair, he is yet screwing his courage to the sticking-point, that the business-credit of his father may be redeemed by his espousal of the widow. Silky and Sulky are conventional characters, but effective stage parts. Mr. Thorne plays the

one with the requisite unction, and Mr. Horace Wigan the other, with the requisite stolidity. Miss Larkin, who (especially by her admirable performance in *Time Works Wonders*) has taught us to expect good things from her, is a little disappointing as the Widow; but that is perhaps because the widow in question is quite the most detestable and selfish of waning coquettes. The hoyden heroine-by-courtesy (Sophia) promises, as a character, more than she fulfils. The best talk of the play proceeds from her in her first scenes; but subsequently she collapses, and becomes a minor part—existing only that young Dornton may be provided with an agreeable wife when his troubles are over. Miss Amy Fawsitt is the Sophia at the Vaudeville; so that we have that which on the English stage is unhappily a rare spectacle—an insignificant character played by an accomplished *comédienne*. Miss Fawsitt gives a force and meaning of her own to every sentence uttered in this part.

"ARKWRIGHT'S WIFE."

THERE seem to be two great faults in the drama of *Arkwright's Wife*, now played at the Globe Theatre: one is a fault of construction and the other a fault of taste. The second is much approved of by people in the gallery, and it has contributed somewhat to the success of the drama. But the first has materially interfered with that success—nay, it has been the one thing to prevent that success attaining any unusual proportions; for without it, the piece would be played for three hundred nights, and what is more, would in the main deserve to be. For it is distinctly a play with an idea; that idea, the difficulty of an exceptional struggle and the cost of an exceptional triumph. But the poverty and weakness of the third act—which is the last—cause the public to receive with respect and interest what otherwise they would receive with enthusiasm. Mr. Tom Taylor is too skilful and too practised an Art-workman to have invented the third act as it now stands, had the work, from the first conception of it, been destined for the stage; but though the playbill does not state it, the drama by Mr. Taylor and Mr. John Saunders is understood to be derived from a novel by the last-named author; and it is quite conceivable that the material of the novel was held to be on the whole too good to reject, merely because the use of it necessitated a conclusion less forcible on the stage than in a printed book. The strong fibre of the first and second acts, the continued and sequent action and the really powerful interest, are nevertheless in strange and unfortunate contrast with the weakness of the third, which has for its *raison d'être* a sort of poetical justice—the wife who long ago broke Arkwright's first spinning-jenny, now saves from destruction the mills of which at last he is master—but even poetical justice is late, and not very effective or very welcome, when it comes after twenty years; and we look on these renewed loves of a now middle-aged couple without very keen sympathy—notwithstanding the agreeable assurance which one of the minor characters gives to the wife's father, that "they will make him a grandfather, after all." Indeed this old man, Peter Hayes, has done nothing to merit the advantage which is promised him; and is it not a little fault—we have spoken already of one of the two great ones—that the malevolent nature of this old man is changed so suddenly at the end, and that the enmity of twenty years is forgotten in a minute? That which, unless we are mistaken, is a grave fault of taste, is not the purely comic but purely *low*-comic business between the barber and the man he shaves, in the first act. To see a man lathered and shaved on the stage is to the gallery almost as delightful a thing as to see a stage feast of real toast-and-water, and hungry Jeremy Diddler's cheeks swollen out with his host's bread. What one is pleased to call the imaginative faculties of our uneducated playgoers are stimulated by the presentment of all the mean details of every-day life. This realism, not of Nature but of common-place, is a thing for which they have a never-failing relish; and the introduction of it has turned many a good drama into that dullest of all dull dramatic things—a dull farce. Mr. Robertson many times yielded to the temptation thus produced (yielded notably in giving us the detestable gas-fitter in *Caste*, acted by Mr. Hare so wearisomely well); and if it be not impertinent to say so, Mr. Tom Taylor would have attained more uniform excellence as an artist, had he, in recognising this temptation, known always how to be proof against it. When a man is capable of rousing so strong an interest in his

story as is undoubtedly roused by most of *Arkwright's Wife*, and when he can write such dialogue as that in the second act, which has about it the ring of great comedy—of high imaginative work—he can afford to leave shaving and eating and boozing to those makers of dramas who are really in need of such support.

Arkwright's Wife is fairly acted by all who appear in it: excellently by the representatives of the three chief characters—the wife, the husband, and the wife's father. In Miss Helen Barry's performance in the first act, there is a touch of Miss Kate Terry's manner, both in gesture and in voice. It is not easily describable, but it is certainly there—like a scent which vanishes the moment you detect it. Miss Helen Barry has much power of facial expression, but this is not always under complete control: the intention being better than the execution. She is a little too vigorous and peremptory—not to say disagreeable—when Arkwright is admiring Margaret's hair, first as barber and presently as man. But her acting is intelligent throughout, and more than once very suggestive—her tone of irritation when she discovers that her jealous fears are shared by a friend, and cannot endure them to be mentioned, is a thing well found and excellently done. Wherever a graceful cajolery is required; or special freedom of stage movement, there the actress is completely efficient. She is good where she may be strong and demonstrative; but she is at present less able to convey suppressed emotion than to make violent and eloquent appeal. Mr. Kelly acts Richard Arkwright with commendable reserve and unwonted repose. He indicates very ably the quiet self-reliance of the man, and his readiness, and his freedom from the irritability of the genius that is artistic: this genius that is inventive in the mechanical arts has a patience less broken by excitement. The dreamy old father, whose blessing and whose curse it is to possess gifts which make him too clever to quite go along with his mates, yet not clever or strong enough to lead them,—a man too gifted to be successful in common paths, and not gifted enough to be successful in paths that are new—is represented by Mr. Emery. He is what is called a "character-actor;" always of old men; and he enters fully into the nature and the ways of this one; being by turns ingenious, and obstinate, and malicious, and doting, and dreaming.

FREDERICK WEDMORE.

NOTES ON ART.

On the occasion of the inauguration of the statue of Massimo d'Azeglio at Turin, which took place on the 10th of November, at the same time as that of the statue of Cavour, the Marquis d'Azeglio, Massimo's nephew, presented to the town a collection of paintings, drawings, and other mementos of his distinguished uncle, "in order to form," as he states in his letter to the syndic, "a Massimo d'Azeglio Museum in his native town."

An article on "Art and Archaeology at the Theatre" by Alfred Darcel appears in the present number of the *Chronique*. It is apropos of the play of *Jeanne d'Arc*, which is now being represented at the Gaité Theatre in Paris with great decorative and scenic effect. The costumes, we are told, have all been copied from manuscripts of the age represented in the play, even the slight differences in the armour of the French and English knights have been carefully observed. The scene at the market-place is described by M. Darcel as "very picturesque," but he finds fault with the architecture of the houses, which belongs to the latter half of the fifteenth century, whereas Jeanne d'Arc was burnt at the beginning of the century. Surely if such exactitude as this is required of scene painters, a little more might be demanded of so-called "historical painters," whose pictures are often anything but "abstract and brief chronicles of the time" they represent.

The winter art season may fairly be said to have begun. The winter exhibition of the Society of Painters in Water Colours, of the Institute of Painters in Water Colours, the exhibition of cabinet pictures at the Dudley Gallery, of British and Foreign Artists at the French Gallery, of the Society of French Artists, in Bond Street, of the studies of Edouard Frère, at Messrs. Agnew's Gallery, in Waterloo Place, of the Old British Gallery, of Doré's "Night of the Crucifixion," of the engraved works of Sir Edwin Landseer, and (most noteworthy of all) the exhibition in solitary glory of Holman Hunt's long

looked for picture of "The Shadow of Death," are now open in London, and will help lovers of art, art critics, and art loungers to while away a few afternoons in "drear December."

In France, the most important winter exhibitions seem to be in the Provinces, the Oriental exhibition at the Palais de l'Industrie being the only one of interest now open in Paris. The Society of the "Amis des Arts de Lyon" announces its annual exhibition for the 9th of January, 1874. Rheims follows with an exhibition in February, and Bordeaux in March. The Versailles Salon of the *Jeu de Paume* will close this month. It has been, say the critics, a very satisfactory exhibition.

The *Gazette des Beaux-Arts* is scarcely as good this month as usual. "Les Editeurs Contemporains," the title of the first article, describes the numerous works on the Middle Ages recently published by the well-known firm of MM. Didot, whose name "consacré par trois générations d'hommes célèbres dans la librairie française, se rattache à toutes les innovations survenues depuis un siècle non seulement dans la typographie mais encore dans la direction générale des études littéraires." The praise accorded, though undoubtedly well deserved, would have more weight if the article did not read so much like a publisher's prospectus. It is profusely illustrated by engravings borrowed from the works it describes, the most important being a heliograph from Marc Antonio's magnificent engraving of Raphael's "St. Cecilia."

Le Comte Clément de Ris continues his description of the pictures in the Belvedere at Vienna, and M. G. Demaz his learned study of "The Seals of the Middle Ages." Mr. C. T. Newton gives a list for the benefit of French readers of the new fragments of the frieze of the Parthenon, which he described in the *Academy* some time ago (vol. iii. p. 283). "Le Musée de Nancy et les collections d'Alsace-Lorraine" receive a first notice from M. Charles Cournalt, and M. Duplessis gives a short biographical notice of the French artist Célestin Nanteuil, who died in September of the current year. Nanteuil is perhaps better known in England as an illustrator of books than as a painter, but his pictures of "L'Avenir" and "Les Souvenirs du passé," lithographed by himself, may be remembered by some of our readers.

In a paper entitled "Du sens Esthétique chez les Animaux et chez l'Homme," M. Louis Viardot not only argues against the Darwinian doctrine of an aesthetic sense in animals, but limits the possession of this sense exclusively to civilized man. Savages, he asserts, have no appreciation of the beautiful. In support of this opinion he quotes a story of some Australian aborigines who were shown the portraits of the Queen and Prince Albert. After some minutes' consideration one man stated that he thought the picture was "a ship," while another cried out "It is a kangaroo!" We are not so sure, considering the villainous libels we have seen in the shape of portraits of these royal personages, whether these poor savages were so far wrong after all, and whether it is not rather an argument in favour of their possession of an innate aesthetic sense that they failed to recognise "le beau" in this particular work.

M. Louis Viardot's argument is weak throughout. He is an excellent popular writer on art, but we should advise him to leave it to able physiologists to refute an induction founded on the observation of Charles Darwin.

The remainder of the number is filled up by a useful but not complete list of works on the Fine Arts published during the last half-year and the index to the volume now completed.

"The artistic event of the week in Paris," says *Le Figaro*, "is the apparition of a new work by Hébert, that has just arrived from Rome." It is a painting of a grand female figure unembarrassed by much costume set in a misty landscape among iris and reeds.

The correspondence headed "An Artist's Difficulty" that has recently been carried on in the *Times* respecting the right of the photographer to keep the negatives of the pictures he is employed to photograph, has provoked the discussion of a subject upon which there is much need of a clear understanding. Mr. Frith, considering that he was unfairly treated by the Autotype Company's refusal of his demand for the negatives of his pictures, tells his grievance to the public by means of the *Times*. The Secretary of the Autotype Company replies that the retention of

negatives is "the custom of the trade as universally accepted, and generally understood to be endorsed by law." Such is undoubtedly the custom, but the law, so far as we can understand, is very hazy on the matter, or rather it has not considered it at all. Mr. Frith ought to have known, indeed must have known, of this universal custom, and we cannot see that he has suffered any especial "injustice." If he wanted the negatives he should have made a definite arrangement to that effect beforehand; otherwise, as the custom now stands, "injustice" would be done to the photographer, who, as Mr. Mayall points out, "gives to his negative time, skill, and attention altogether out of proportion to the honorarium he is working for at the moment; and he does this with the distinct purpose of rendering the negative a valuable one for the future." The remedy of the artist lies at hand, and his "difficulty" after all does not seem insurmountable. Let him pay the photographer in proportion to the "time, skill, and attention" that he gives to his work, and then, if it is so understood beforehand, the negatives will be his property as much as the copper-plates of his prints. Indeed M. Adolphe Beau already advertises that all negatives taken by him may be purchased at a price corresponding to their artistic value.

New Publications.

- ARMELHAULT, J., et E. BOCHER. *L'Œuvre de Gavarni*. Paris: Lib. des Bibliophiles.
 BAUR, G. A. L. *Boetius und Dante*. Leipzig: Dürr.
 BECQ DE FOUQUIÈRES, L. *Poésies choisies de P. de Ronsard*. Paris: Charpentier.
 DASENT, G. W. *Tales from the Fjeld. A Second Series of Popular Tales from the Norse of P. Chr. Asbjørnsen*. Chapman and Hall.
 GENÉRYDES, a Romance in Seven-line Stanzas. Part I. Ed. W. Aldis Wright. (Early English Text Society.) Trübner.
 GOSSE, E. W. *On Viol and Flute*. King.
 HAVARD, H. *Les quatre derniers siècles. Etude artistique*. Livr. 1 et 2. Berlin: Pfeiffer.
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Theology.

Contents of the Journals.

[The following were accidentally omitted from our last number.]

Theolog. Literaturblatt. [The learning, high general culture, and moderation of this organ of the liberal Catholics of Bonn should render it highly acceptable to the majority of English theologians. Its collapse would at any rate be a loss to theological science, and we unite with an esteemed contemporary, the *Guardian*, in recommending it to the support of our readers.]—The following are among the articles of most scientific importance within the last two months: Oct. 11.—Adolf Schwarz' *Jüdischer Kalender*; reviewed by Dr. Flöckner, with remarks by Prof. Luterbeck at the close, based on the calendar, on the chronology of the life of Christ.—Oct. 25.—Renan's *L'Antéchrist*; by Prof. Langen, of Bonn, who observes that M. Renan has avoided many of the critical extravagances into which the Tübingen school have fallen, owing to their "dogmatic rationalism" (scarcely a successful phrase!), but that his historical attitude has not preserved him from the wildest

assertions on doctrinal points, e.g. on the origin of the doctrine of individual immortality among the Jews (p. 467). He has also pressed the Neronian hypothesis extravagantly far.—Nov. 8.—Hausrath's *Neutestamentliche Zeitgeschichte*; by Prof. Langen. This work deals with the same subject as Renan's *L'Antéchrist*; but while the latter employs contemporary history rather as a commentary to the Biblical material, Dr. Hausrath devotes equal care to all parts of the history of the period. Prof. Langen had already expressed a highly favourable opinion on the ability and thoroughness of the work, though these merits are neutralized to him by the heterodox position of the author. In the same number, Kuno Fischer's last volume, relating to Schelling, finds an appreciative reviewer in Dr. Katzenberger (O. Jean Paul!).—Nov. 22.—Immer's *Hermeneutik des N. T.* is noticed with discrimination, but on the whole favourably, by Prof. Langen. It is described as above the average of students' handbooks, thoughtful, and pervaded by a high moral tone. Zeller's Lectures on State and Church receive an impartial recognition from Prof. Weber of Breslau.

Zeitschr. f. wissenschaftl. Theologie, 1873, No. 4.—The first epistle of Peter; by A. Hilgenfeld. [A new Petrine question raised by I. R. B. Weiss, who contemptuously rejects the arguments of the Tübingen school against the genuineness of the first epistle, and now undertakes to prove the genuineness of the second. But if the Tübingen critics were right as regards the first epistle, the genuineness of the second, which contains a reference to the first (iii. 1), is ipso facto disproved. Hilgenfeld here enters the lists for the old Tübingen view, though he admits that it had one fault, that of giving too much prominence to the irenic purpose of the epistle.]—The composition of the Gospel according to Luke; by C. Wittichen. [In its present form a monument of those endeavours of the Jewish Christians in the Roman church which issued in the Clementine literature.]—Philo and the traditional text of the LXX.; by C. Siegfried, conclusion.—Abraham, the "Friend of God"; by H. Rönisch. [Accounts for the phrase by a derivation of Abraham from *rdham*, supposed to equal *rakham* to love. Refers among the other ancient explanations to the well-known one of Molon in Eusebius, but overlooks the remarkable fact that in Assyrian *rdham* does coincide in meaning with Heb. *rakham*, whence Harkavy actually proposed as the true meaning of Abraham "père de l'amour," *Revue Israélite*, No. 6.]—Notices. Edition of Codex Amiatinus; rev. by K. L. F. Hamann (who points out the manifold imperfections of the edition, and purposes to examine the codex on the spot), &c.

Theologisch Tijdschrift. November.—On the history of the ancient (i.e. national) religions, its method, spirit, and importance; by C. P. Tiele. [Introduction to a course of lectures.]—Permanent significance of the Gospel of the Cross from the modern point of view, part i.; by S. Hoekstra.—Moses and the Exodus in connexion with Egyptian documents; by C. P. Tiele. [Chiefly on Eisenlohr's and Chabas' researches on the Harris papyrus. Mr. Tiele, who prefers the version of M. Chabas, is unaware that Eisenlohr has published the text with translation and notes in the Transactions of the Soc. Bibl. Arch., vol. i., p. 355, &c.]—Prof. Fraser's edition of Berkeley; by Dr. van der Wijck.—Notices of Books. Ewald's *Die Lehre der Bibel von Gott*, vol. ii.; by Kuenen, &c. [According to him, Ewald confounds Biblical and his own dogmatic theology, a "frightful illusion," which however does not preclude many delicate and often surprising contributions to the former subject in points of detail.]

Jahrbücher für deutsche Theologie, vol. xviii., No. 3.—Diestel: Hebrew historical writing; an inaugural lecture.—Düsterdieck: The Prophet Isaiah; an address in the Evangelical Union.—Schmidt: On the idea and practical importance of church dogma.—Wagenmann: Secular memories of church history (from 373 onwards).—Förster: Macarius of Egypt. [A valuable analysis of the works of the elder Macarius.]

Bibliotheca Sacra, Nos. 118 and 119.—Paul's Panegyric of Love: a new critical text, translation, and digest; by A. W. Tyler, M.A. [We regret not to have called attention earlier to this remarkably thorough re-examination of 1 Cor. xiii., which is said to have "cost its author at least three hours a day for nine months."]

Intelligence.

Mr. R. L. Bensly, sub-librarian of the Cambridge University Library, has lately discovered the long lost portion of the Latin version of the 4th book of Ezra; that is, the seventy or eighty verses which have fallen out between the 35th and 36th verses of the 7th chapter. Mr. Bensly hopes shortly to publish a small pamphlet on the subject.

Mr. Neubauer, sub-librarian of the Bodleian, has in the press a collection of texts of Jewish authors on the famous chapter Isa. lii. 13-14, with English translations. It will contain the Greek of the LXX. and Aquila, the Hebrew of the Talmud and of various commentators down to Luzzatto, the Arabic of Saadyah, Yepheth, ben Ali, &c., the Chaldee of the Targum and Zohar, a Persian translation of the fourteenth century, and a Tataric of the Karaites of the Crimea. It is understood that the expenses of publication will be borne by Dr. Pusey.

Physical Science.

Monograph of the Collembola and Thysanura. By Sir John Lubbock, Bart. London: Published for the Ray Society.

THE reader of Kirby and Spence's well-known "Introduction to Entomology" will remember a letter in which while treating of the motions of insects the authors tell of a tribe of minute apterous beings found often under the bark of trees, on the surface of water, and in various other situations, which Linneus has named Podura, a term implying that they have a leg in their tail. By this leg these little creatures can leap sometimes two or three inches: one minute black species, which is to be found in spring floating on the water of ruts and ditches, may often be seen in such vast numbers as to look like a heap of gunpowder, the black grains of which had been ignited. Another, called by Latreille *Machilis polypoda*, abounding at East Farleigh, near Maidstone, is said to have no less than eight pair of these spring legs—one on each ventral segment of the abdomen, by means of which it leaps to a wonderful distance and with the greatest agility. It is of this little tribe of minute beings among the wingless insects that Sir John Lubbock has written the monograph the title of which stands at the head of this notice.

The first memoir on the group to which the author refers is that of de Geer—published shortly after the appearance of the first edition of the *Systema Naturae*; the spring tails had however attracted the attention of naturalists long before that date; more than a quarter of a century earlier than the birth of Linneus Rayger and Camerarius had written about and figured the insects that reached the ground with the softly-falling snow, and for many years afterwards there now and then appeared a paper on "Insecta nive delapsa," or "Schneewürmer," all of which are related to some one or other of the Thysanura. In America we find that these little creatures are at this day called snow-flies, and we notice in passing that Loew (F.) asserts that nearly one-fourth of the recorded European species have been met with on the surface of snow, although they may also be met with all through the summer's day.

Winter does not kill them, and the ever active entomologist will find numbers of them to collect in all seasons. Franz Xaver von Wulfen wrote in 1788 a treatise under the title of *Winterbelustigungen*; and among the amusements of this season he enumerates the collecting of Thysanura. So this volume of the Ray Society's publications, though issued to subscribers late in 1873, instead of early in 1871, is though somewhat out of date not out of season, and its publication may induce some of its readers to at once investigate this group for themselves. Some may fear that Sir John Lubbock has left no fresh fields to explore; he has, on the contrary, only turned up the soil, and it will be for others now to sow and reap.

After De Geer Linneus, Geoffroy, Fabricius, and Müller described several species of Podura, and the genera Lepisma and Forbicina were established. In 1796 Latreille instituted the order Thysanura, which he divided into two families characterised by the two genera Lepisma and Podura; placing Lepisma in his first family. In this monograph the author restricts the term Thysanura to the Lepismidae and the allied families, giving the name of Collembola to the present representatives of the second family of Latreille: thus there are two groups, the Thysanura and the Collembola, which together equal the Thysanura of Latreille, and to include which some new term must be invented. We would however have preferred to retain

Latreille's name for the order, and divide it into two sub-orders: the Collembola and Acollembola.

The indefatigable Latreille, in his seventieth year and just before he died, published an extended memoir on the external anatomy of the Thysanura, and shortly after his death Mr. R. Templeton wrote a paper on Irish Thysanura, which is remarkable as being the first of any importance published in English. This paper appeared in the first volume of the *Transactions of the Entomological Society of London*, and Mr. Westwood prefixed to it some very valuable remarks on the difficulty of deciding on the affinities of the group.

The Abbé Bourlet published his "Mémoire sur les Podures" in 1839, and in 1843 a memoir "Sur les Podurelles," which latter is in reality the former memoir modified in several points, and considerably added to. Unfortunately the Abbé was not acquainted with the writings of either Burmeister or Templeton; his work appears to have been in every other respect well and conscientiously executed.

The next most important work on the group was Nicolet's "Recherches pour servir à l'histoire des Podurelles," published in 1842. If it was unfortunate that Bourlet did not see the papers of Burmeister and Templeton it was doubly so that Nicolet had not made himself master of both Burmeister's and Bourlet's writings; and to the fact that Bourlet and Nicolet wrote in ignorance of each another's labours may in great measure be traced the confusion that to this very day exists in the synonymy of the group. In 1847 Nicolet did his best to remove this confusion by publishing an essay in the *Annales de la Société Entomologique de France* for that year. "Sur une classification des Insectes Aptères de l'ordre des Thysanures," where he gives a list of all the then known species, with synonyms. We have always found this list very exact, and it even takes note of good species that have been overlooked in the enumeration of species in Sir John Lubbock's monograph. We are inclined to think that Nicolet's "Recherches" were the most important that up to 1860 had been published on the group—giving as they do details of the anatomy, and full descriptions of the external form of most of the species, and illustrating these by very excellent plates. Between 1840 and 1860 a few valuable contributions to our knowledge made their appearance, and of these we would mention the descriptions of the Algerian Thysanura by Lucas as published in the "Exploration Scientifique de l'Algérie" in 1849. The coloured illustrations of this memoir are most excellent, and might well be taken as a model. As no species or details of the genus Lepisma are figured in the present monograph we may refer the student to the figures and descriptions of the species of this genus in Lucas' work, as well as to the figures of two other species in Savigny's great work on Egypt. Frauenfeld in 1854 made out a new genus Tritomurus for a blind species, which had been found by Herr Schmid in a cave at Treffen; and Kolenati (1850) in describing a second species from the Slouper Cave, Moravia, added a new species to the genus Anurophorus (Lipura). Papon published a figure and an account of a Desoria found at Chur during a snow-storm in February, 1855. But this species is evidently only Podura (*Isotoma*) arborea.

If little original work was done during this period it scarcely arose from any lack of attention on the part of entomological compilers. Not only did M. Lucas, in 1843, give an elaborate analysis in French of all the memoirs that had appeared on the Poduridae up to that date, but Herr Eldett did the same in 1854 in North Germany, and Herr Kolenati in 1858 in South Germany—these analyses being published respectively in the *Annales Soc. Ent. de France*, in the *Stettin. Ent. Zeit.*, and in the *Wien. Ent. Monat.*

From 1860 to the present year considerable advances have been made in our knowledge of the anatomy of this group. Olfers in his Inaugural Thesis, published in July, 1862, led the way, soon to be followed (1862) by Sir John Lubbock, whose first and second contributions to the history of the Thysanura were published together in part 3 of vol. xxiii. of the *Transactions of the Linnean Society*.

In 1864 La Boulbene published his elaborate paper on the anatomy of *Lipura maritima*. This most excellent and well illustrated essay is well worthy of attentive study. In this same year appeared A. H. Haliday's memoir on *Iapyx*, to be followed in 1865 by F. Meinert's very exhaustive memoir on the Campodeae. The year 1866 produced only the description of a new blind species of *Lepisma*, by Bilimek, from the cave of Cacahuamilpa, in Mexico, and in 1868 Sir John Lubbock's third memoir was issued.

Tullberg's valuable monograph on the Lipuridae appeared in 1869, and the fourth memoir by Sir John Lubbock in 1870. Packard, moreover, published in 1869-1871 descriptions of some new American Thysanura, including a species of Campodea and a series of observations on the embryology of an American species of *Isotoma*; he seems not sufficiently to appreciate Nicolet's work. These memoirs, it may be remarked in passing, though allusion is made to the latter, are not cited in the present work; they appeared in the *Proc. Soc. of Nat. History of Boston* for 1870 and 1871.

Without pretending in this very general sketch to give much more than a comment on a list of the principal writings on this group, what has been said may suffice to show the materials so largely contributed to by the author of the monograph under notice, which lay at his disposal in the preparation of the present work; and we experienced a feeling of disappointment in finding that the work now completed does not uphold the high promise of the author's earlier investigations and descriptions. Since 1862 other duties have in great measure occupied a large portion of his time; and we regret that the Ray Society did not provide for a careful supervision of the sheets of this work during its passage through the press, as by that means many dozens—we had almost written hundreds—of perhaps trifling but still annoying errors might have been avoided. That a student should make a list of references and be unable to find one of them because they are one and all wrong is, it will surely be admitted, vexatious. Moreover, not only are the mere bibliographical references often wrong, but the quotations are in numerous cases so incomplete that they become nearly useless. Our volume opens on page 214 at *Nicoletia* Gervais. Now so little is known about this genus that we should have expected to find that all the references would be given respecting it; there is however no reference either to the time or place of the first description of the genus. Again, Nicolet's amended diagnosis ought to have been given in full, for it is not in the power of every reader to turn at once to the *Annals of the French Entomological Soc.* for 1847. It should also be remarked that it was Gervais, not Nicolet, who named the two species of this genus. On the same page we have the diagnosis of the family Iapygidae, condensed in a most unsatisfactory manner into four lines, and the description of the genus and the European species dismissed in the following page, while the correct Latin diagnosis of neither Haliday nor Meinert is followed.

Lest our calling attention to such errors of commission should seem to savour of mere fault-finding, we will not allude in passing to the mistakes of reference from the text to the plates which frequently occur, but sometimes the figures do not even correspond with the descriptions; among the Degeeridae, for example, while in the text *Isotoma* is said to have seven ocelli, plate 55, fig. 18, shows eight; and

while *Tomocerus* in the plate has six ocelli, in the text it is stated to have seven. From the want of the simplest supervision the English descriptions of the species are sometimes puzzling: in the description of *Tomocerus plumbeus* (p. 138) we fancy that for *T. plumbea* one should read *T. longicornis* in at least four instances in which the reference is made; but in the last paragraph for want of some correction we fail to make sure of the author's meaning.

The slight confusion caused in the printing of page 38 can at once be corrected by any one who has the fourth memoir of Sir John Lubbock at hand. Were we however to find fault with the printer's errors of this volume our task would never be done, as they commence with the first page of the preface, and continue as far as Mr. R. Becks' Notes on the Scales of Thysanura; these last few pages being singularly free from them. We trust we may be forgiven for calling attention to these errors, and for further hinting that some errors of omission have also struck us in the perusal of the volume: for example, although Templeton's second paper is evidently known to the author, he has omitted to give his *Lepisma niveofasciata* in the list of species of this genus; *L. thermophila* Lucas is also omitted; as well as Bilimek's *L. anophthalma* from Mexico. This latter, however, is possibly not a *Lepisma* at all.

Campodea Americana is omitted, and if *Iapyx gigas* Br., from Cyprus, is quoted, why is not the equally remarkable *L. Saussurii* Humb. from Santa Cruz? There is no reference to the American Snow Flea (*Achorutes nivicola* Fitch), though described in the Transactions of the London Entomological Society for 1851.

As subject of criticism on which opinions may fairly be divided, we would suggest that *Tomocerus niger* Bour is nothing but the young of *T. plumbea*; and we are surprised that the courageous compiler of the synonymic list of *Orchesella cincta* Linn. should have left it as an independent species. Ptenura Templeton should we think be quoted as a synonym of Templetonia Lubbock. Again, is Tritomurus of Frauenfeld a good genus? Type specimens alone can settle this. *T. macrocephalus* Kol. seems to be an error, but if quoted at all the entire description should have been given. Wankel's description of an unnamed species of the genus appears in the *Verh. d. Zool. Bot. Ver. Wien* for 1856, p. 467. Of Degeeria Nicolet, the generic characters are emended and the scaly species taken from it and placed under Seira Lubbock. The spring in Degeeria is surely erroneously represented in fig. 15, plate 55.

Onychiurus Ger. Anurophorus Nicolet and Adeacranus Bourlet might have been quoted as synonyms of *Lipura* Burmeister. We fail to understand what is meant in the diagnosis of this genus by "Mandibles and maxillae as usual." Some note might have been made of Kolenati giving figures of several stigmata in his *L. Kollarii*, and as so many type specimens are in the Continental museums, the general description ought certainly to be revised. The two groups of fourteen ocelli each as described by Schiödte in *L. stillicidii* are considered by Lubbock to form the post-antennal organ. As however in *L. maritima* this organ exists with ocelli, we see no grounds for supposing these ocelli in the Adelsberg Cave species to constitute a post-antennal organ; and it will be remembered that in the species of *Lipura*, so nearly allied to Schiödte's taken by the writer in the Mitchelstown Cave, these ocelli were absent. Under *Campodea staphylinus* J.O.W. there should be included, not only *Podura ambulans* Linn. Syst. Nat., but the *Lepisma minuta*, of Müller. This is hardly the place perhaps for the discussion of such purely technical questions; in touching on them, however, we have endeavoured to avoid all matters of controversy.

Few if any of the illustrious writers we have quoted have done so much good or genuine work for the Thysanura as the author of the present monograph, which will be henceforth the starting-point for all workers and writers on the subject. That his present volume is not quite perfect; that it is wanting in that aroma of fresh field work which at one time pervaded his entomological investigations, is we believe not so much his fault as our bad fortune. His past work has shown him to be not only an ardent but a philosophical writer; and it ought to have been a pleasing duty for some one to have helped him, as he in former years has so well helped others, in the small but important and tedious details of correcting the press and of tabulating synonyms.

We endorse the author's praises of Mr. Hollick's drawings; but his own accurate anatomical drawings—not too neatly copied from the plates in the *Transactions of the Linnean Society*—are those that will be most consulted by the student.

E. PERCEVAL WRIGHT.

Notes on Scientific Work.

Chemistry.

Crystalline Dissociation.—A further paper on this subject by P. A. Favre and C. A. Vaisson appears in the *Compt. rend.* 77, 577.—During the solution of a salt in water a contraction of volume is known as a rule to take place; a contraction of the salt as well as of the solvent. Its extent is easily ascertained by comparing the density of the saline solution with that of the salt and of the liquid. As now a diminution of volume may be produced in other ways, by cooling, by the withdrawal of a certain quantity of heat, we are able to determine the amount of heat corresponding to a certain contraction of the water and the mechanical effect of which it is the equivalent. When it is allowed that the different forces which are able to produce the same effect are equivalent it follows that in a determination of the contraction of volume by the solution of a salt we have a measure of the coercive force exerted by the salt on the water. The authors have already made use of this principle in their investigation on the solubility of sodium sulphate in water. They have now extended it to a number of other salts, in the accurate determination of the densities of which they experienced great difficulties, especially in the case of the iodides which act upon turpentine. As regards this contraction they found these salts to arrange themselves in the following ascending order: borates, carbonates, sulphates, chlorides, nitrates, bromides, iodides. The contraction produced by an anhydrous salt is greater than that of a hydrated salt; calcium chloride, it may be mentioned, is the only salt which exhibits no marked difference in its two forms. The contraction attending the solution of a hydrated salt is usually less than that arising from the separation of crystals. The amounts of heat given in some of the tables of this paper, and corresponding to the contraction, far exceed those noted by the calorimeter; the same difference was noticed before in the case of sodium sulphate. This arises from the fact that the quantity of heat produced by the contraction of the water during the act of solution is not evolved, as in spontaneous cooling, as sensible heat, but is often completely absorbed by the salt that is dissociated and becomes latent. The temperature indicated by the calorimeter then is the difference, often with a negative sign, between the thermo-positive phenomenon of the contraction of the water and the thermo-negative phenomenon of the dissociation of the constituents of the salt.

Chloro-vanadates.—A paper on these compounds by Hautefeuille has appeared in the *Compt. rend.* 77, 896. Vanadinite may be artificially prepared by fusing vanadic acid with lead oxide and an excess of lead chloride at a red heat. On removing the excess of lead chloride the vanadinite remains in yellow transparent crystals. The number of vanadates that combine when fused with chlorides is not great. Magnesium chloride gives vanadium chloride and magnesia; the latter is said to be in a crystallised condition. Calcium chloride when fused with the acid gives a chloro-vanadate. When such a fused mass is treated with water there remain crystals with an adamantine lustre, the composition of which is vanadic acid 39.07, lime 36.66, calcium chloride 23.75. This compound corresponds to wagnerite in so far that it contains similar equivalents of vanadate and chloride.

A New Alkaloid from Morphia.—The new substance has been prepared by G. Nadler by the action of an ammoniacal solution of cupric oxide on morphia (*Schweiz. Wochenschrift* xi, 12). Its chloride is of a brilliant white and is easily soluble in hot water, from which ammonia throws down an amorphous precipitate, that remains unchanged in the air in the moist state. With concentrated sulphuric acid it strikes an

intense green colour. From the potash solution when boiled the alkaloid separates in scales having the lustre of silver. It is moreover distinguished from morphia by the trifling solubility of its sulphate, and from apomorphia by its stability in moist air.

Podocarpinic Acid.—This name has been given by A. C. Oudemans to a new acid, allied to the resins, which occurs in the wood of the *Podocarpus cupressina* var. *imbricata*, from Java (*Ber. Deut. Chem. Gesell. Berlin*, 6, 1122). It forms rhombic crystals that are insoluble in water, and almost insoluble in benzol, chloroform or carbon disulphide, but which are easily dissolved in alcohol, ether, or acetic acid. They melt at 187° and are decomposed at 300°. The composition of this substance is $C_{17}H_{23}O_3$. It is monobasic, but gives two different series of metallic salts. Nitro- and sulpho-derivates, as well as others formed with ethyl and acetyl, have been prepared.

Chromium Dioxide.—Hintz has found (*Annalen der Chemie*, 169, 367) that the best method of forming this body is that recommended by Schweitzer, of passing nitrogen dioxide through a moderately dilute solution of potassium bichromate. The hydrate thus obtained when dried at 250° has a constant weight. The anhydride is a very intense black powder and is extremely hygroscopic; the hydrate on the other hand has a dull reddish brown colour, that ascribed by Vauquelin to the anhydride. When the black oxide is treated with chlorine, or, what is better, hydrochloric acid, the temperature slowly rises to 250° and there is formed chromium oxychloride, some of which undergoes decomposition, forming chromium chloro-chromate $Cr_3O_6Cl_2$. Dry hydrochloric acid gas when allowed to come in contact with chromium dioxide forms water, chlorine, and green chromium oxide, and by a later decomposition of the last-mentioned oxide, violet chromium chloride. Phosphorus chlorides appear to have scarcely any action on the black dioxide, which in its very inactive characters bears a marked contrast to the corresponding oxide of molybdenum. Whether it is a peroxide proper, CrO_3 , or a basic chromate of chromic acid, Cr_2O_3 , CrO_3 , has yet to be determined.

The Decomposition of Metallic Sulphides.—It has been noticed by E. Jannettaz (*Compt. rend.* 77, 838) that potassium bisulphate when rubbed together with pounded galena causes a brisk evolution of sulphuretted hydrogen. Sulphuric acid, on the other hand, exercises no action on the powdered mineral even when heated with it. Zinc sulphide exhibits the same reaction though in a less degree. The sulphur compounds of antimony, iron, mercury, and silver are quite indifferent, as are also those minerals in which lead and sulphur occur in combination with other sulphides.

Coptine.—E. Z. Gross, who has recently examined *Coptis trifolia* (*Helleborus trifolius*, Linné) finds it to contain, in addition to berberine, a new alkaloid which he has named coptine (*Amer. Jour. Pharm.* xiv, 193). It differs from berberine in being colourless, in giving a precipitate with potassium-mercury iodide, and in dissolving in cold sulphuric acid without undergoing change.

A New Quinine Hydrate.—It has been found by A. C. Oudemans (*Ber. Deut. Chem. Gesell. Berlin*, vi, 1165) that in addition to the two already known hydrates of quinine there exists a third containing nine molecules of water, $C_{20}H_{24}N_2O_3 \cdot 9H_2O$. It is amorphous and does not differ in appearance from that containing three molecules of water.

Mineralogical Notices.—In continuation of former papers bearing this title, a paper was communicated to the Chemical Society on the 4th instant by N. S. Maskelyne and W. Flight on the crystallographic and chemical characters of caledonite and on lanarkite. Some specimens from Leadhills, recently procured for the British Museum, having been found on analysis to have a composition differing from that of caledonite, a specimen of true caledonite was also examined, and while neither analysis accorded with that of Brooke both agreed in showing this mineral to be lead sulphate in combination with lead hydrate and copper hydrate. Lanarkite was found to contain no water and to be a compound of lead sulphate and lead oxide, as Pisani has shown.

Prof. A. W. Williamson, President of the British Association, has been elected Foreign Secretary of the Royal Society, and a Corresponding Member of the Academy of Sciences.

Botany.

The Source of Nitrogen in the Food of Plants.—In the *Annales des Sciences naturelles* for September M. Dehérain discusses this subject from a somewhat novel point of view. While adopting the conclusions of Lawes and Gilbert, Ville, and Boussingault, that plants have no power of absorbing nitrogen directly from the air, he still holds that the atmospheric nitrogen is the source of that which enters into the composition of the tissues of the plant. The results of a series of investigations which M. Dehérain has carried out tend to show that atmospheric nitrogen is fixed and retained in the soil through the medium of the hydrocarbons such as humus, in conjunction with alkalies, and that this fixation is favoured by the absence of oxygen. In other words, the fixation of atmospheric nitrogen occurs when organic materials are in process of

decomposition in an atmosphere either deprived of oxygen or in which that element is deficient. Under these circumstances carbonic acid and hydrogen are both given off, the latter uniting with nitrogen to form ammonia. According to the earlier researches of Thenard there are in soil two strata exposed to the action of the atmosphere—an upper oxidising and a lower deoxidising stratum. In the first stratum the nitrogen is obtained from the atmosphere, and impregnates the subjacent soil around the roots; in the second the nitrogenous compounds are converted into insoluble humates. The air of the soil is therefore at a certain depth deprived of oxygen; hydrogen is produced as the result of the decomposition of organic substances; and this hydrogen unites with the nitrogen to form ammonia. If these views are correct, they will have a considerable practical importance in agriculture, the value of a manure depending not so much on the actual amount of nitrogen present in it as on the quantity of carbonaceous substances which possess the power of taking up nitrogen from the atmosphere.

Irritability of the Sensitive Parts of Plants.—M. E. Heckel, in the *Comptes Rendus* for 27th October, points out the importance of the two kinds of irritability in plants first described by M. Bert—the one spontaneous, the other incited. The Sensitive-plant, *Mimosa pudica*, on which M. Bert chiefly experimented with a view to test the influence of anaesthetics on these phenomena, is however subject to the disadvantage of combining these two kinds of irritability. M. Heckel experimented instead on the stamens of *Mahonia*, in which the only motion is one resulting directly from irritation, and in which there is no spontaneous sensibility. On exposing these to the action of chloroform he found the irritability to be at once entirely destroyed. The stamens of *Ruta graveolens* present the converse phenomenon of an automatic sensitiveness, but with no irritability, their motion being caused by forces independent of direct excitation. Exposed to chloroform, they underwent no change whatever. He concludes that incited (irritable) movements have a special determination belonging to functional irritability; while spontaneous (sensitive) motions belong to the general life of the plant and may be described as a nutritive irritability.

Geology.

The Igneous Rocks of Styria.—Dr. R. von Drasche describes in *Mineralogische Mittheilungen*, 1873, part 1, the mineral constitution of some of the igneous rocks of Styria. The highest peak of the Smrkouz Mountains consists of andesite which, when examined in thin sections, presents a mass of crystals of plagioclase with a clear green mineral of distinct outline that he considers to be diallage; the ground-mass is a structureless serpentine-like substance enclosing plagioclase crystals in large quantity. Hornblende-augite-andesite occurs in numerous bands and veins in the tuff of Osloberg, south of the Smrkouz Mountains. The hornblende crystals have a blackish-green colour and are about three mm. long, the augite occasionally resembling diallage. A much altered andesite is found at Sagai on the southern slope of the Wotsch Mountains. The plagioclase crystals here attain a length of four mm., are greenish in colour, and have no action on polarised light. They are disposed in a green amorphous ground-mass resulting from the decomposition of augite and hornblende, which contains much magnetite and copper pyrites. At Videna, near Rohitsch, is found a compact dark-brown to black augite-andesite. A thin section shows much plagioclase in small crystals with well defined crystals of augite in a fine grained ground-mass. It also encloses long crystals of a somewhat metallic lustre, with distinct cleavages parallel to their larger dimension. Perpendicular to this direction it is much fractured; it is quite infusible before the blowpipe. Its optical properties prove it to belong to the rhombic system and Drasche regards it as bastite. In the tuff district near Wöllan rises a small hill consisting of a quartz-hornblende-andesite. The felspars here are plagioclase with a little orthoclase; the quartz crystals are much fractured, the interstices being filled with the fine-grained ground-mass; the hornblende is in very distinct crystals, and a little magnesian mica accompanies them. At Tüffer two varieties of a "hornstone trachyte" are met with, one red in colour, possessing considerable hardness and splintery fracture and enclosing occasionally some small crystals of orthoclase felspar; the other a green variety, also very compact, and somewhat resembling petrosilex; this under the microscope exhibits spots of a greenish hornblende or chloritic mineral. Between St. Georgen and Monpreis rises a chain of hills which consist of a much weathered rock of a light reddish colour presenting in its fresh condition a felsitic appearance; it consists of a felspar, the species of which is quite unrecognisable in consequence of its being much weathered, and quartz in crystals, and is penetrated by numerous small veins of the latter mineral. All of these rocks, formerly considered to be of triassic age, are shown by von Drasche to belong to the tertiary period.

Diallage in Quartz Porphyry.—Diallage, formerly regarded as a peculiarly essential constituent of gabbro, has been found to constitute an important part of some melaphyres, as well as picrite and andesite. It is now observed (*Mineralogische Mittheilungen*, 1873, part 1, p. 47) to be an essential ingredient of a quartz porphyry from Crasdorf quarry,

near Taucha, east of Leipzig. By an examination of microscopic sections the large felspar crystals prove to be orthoclase, the smaller plagioclase. The quartz is in grains, most of them rounded or of very irregular outline, and only rarely in crystals. The diallage occurs in short green prisms with sharp outline, only slightly dichroic, the colour ranging between yellowish-green and emerald-green, and is much less abundant than the plagioclase. This rock does not correspond with the normal type of the quartz-porphyrus, but is intermediate between them and the palatinite.

A New Fossil Lemur from the Phosphate Beds of Quercy.—M. H. Filhol points out, in a note to the French Academy of Sciences (*Comptes Rendus*, 1873, No. 19, vol. 77, p. 1111), the more important peculiarities of the cranium of another new genus of the family Lemuridae, lately found in the phosphate beds of Quercy. The interorbital space is wide and differs much from that of the *Lori*. The orbits are large and indicate an animal of nocturnal habits; the temporal crests are united posteriorly to the frontal, while in the *Nycticebus* they are directed backwards without being united. The teeth are not so sharp as those of the *Lori* and the first premolar of the upper jaw is far less developed. The molars bear a great resemblance to those of the *Galago*, but in that genus there is an interval between the first and second upper premolars, and the first upper premolar is very stout and presents the aspect of a canine, neither of which peculiarities is noticed in this fossil. The form of the lower maxillary is the same as that of *Galago*; and the tympanic bone is also similarly developed. This fossil, to which M. Filhol assigns the name of *Necrolemur antiquus*, is closely allied to the *Galago*, though it also presents some affinities with the *Lori*.

The Quartz-bearing Andesites of Transylvania and Hungary.—Dr. C. Doelter describes the results of his examination of 200 hand specimens and 90 sections of the Dacites or Quartz-bearing Andesites of Hungary and Transylvania. These rocks essentially consist of plagioclase, sanidine, quartz, hornblende, augite, biotite, magnetite and apatite; the accessory minerals are epidote, chlorite, pinxitoid and pyrites. Nepheline and tridymite have not yet been observed in them. The plagioclase is of very variable composition, corresponding for the most part with andesite, but is sometimes to be referred to labradorite. From 53 to 60 per cent. of the mass consists of plagioclase. Sanidine is a constant constituent, but varies considerably in amount: in a few cases it forms a third part of the whole felspar contents, but the plagioclase is frequently present in the proportion of from five to six to one of orthoclase. Quartz also varies greatly in quantity, and occurs either as rounded grains or crystals. Hornblende is usually in larger quantity than augite, and biotite is always present. These rocks are all very much decomposed, some of them being converted into a white friable chalk-like mass, enclosing quartz; those at Vöröspatak, Boieza, and Rodna being specially remarkable for the amount of gold they contain. The Dacites have a very limited distribution, the principal districts being the Vlegyasa-gebirge and the Siebengebirge. (*Mineralogische Mittheilungen*, 1873, part 2, p. 51.)

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- BOUCHON-BRANDELY, M. Rapport au ministre de l'instruction publique sur l'état de la pisciculture en France et dans les pays voisins. Paris: Wittersheim.
- CATALAN, E. Recherches sur quelques produits indéfinis. Paris: Gauthier-Villars.
- CHOMET, H. Effets et influences de la musique sur la santé et sur la maladie. Paris.
- CLASSEN, A. Grundriss der analytischen Chemie. 1^{er} Theil: Qualitative Analyse mit besonderer Berücksichtigung der Nachweisung organischer Verbindungen. Bonn: Marcus.
- CORLIEU, A. La mort des rois de France, depuis François 1^{er} jusqu'à la révolution française. Paris.
- CRIÉ, L. A. De Phyllostictae cruentae distributione geographica. Paris: Masson.
- DE CANDOLLE, A. Réflexions sur les ouvrages généraux de botanique descriptive. Genève: Ramboz et Schuchardt.
- DEHÉRAIN, P. P. Recherches sur l'intervention de l'azote atmosphérique dans la végétation. Paris: Masson.
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- DURÉGE, H. Elemente der Theorie der Functionen einer complexen veränderlichen Grösse. 2^{te} Auflage. Leipzig: Teubner.
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- FOSTER, M., and BALFOUR, F. M. The Elements of Embryology. Macmillan.

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- JACQUIER, E. *De l'esprit des mathématiques supérieures.* Paris: Gauthier-Villars.
- JOURNAL des Museum Godeffroy. 3 und 4 Heft. Hamburg: Friedrichsen und Co.
- JURÁNYI, L. *Ueber die Entwicklung der Sporangien und Sporen der Salvinia natans.* Berlin: Friedländer und Sohn.
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- MELDRUM, C. *Notes on the Form of Cyclones in the Southern Indian Ocean, and on some of the Rules given for avoiding their Centres.* Eyre and Spottiswoode.
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- THOMAS, H. J. *Beiträge zur allgemeinen Klimatologie.* Erlangen: Enke.
- TISSANDIER, G. *Les merveilles de la photographie.* Paris: Hachette.
- TODHUNTER, I. *A History of the Mathematical Theories of Attraction and the Figure of the Earth from the Time of Newton to that of Laplace.* Macmillan.
- VON BAER, K. E. *Entwickelt sich die Larve der einfachen Ascidien in der ersten Zeit nach dem Typus der Wirbelthiere?* St. Petersburg: Röttger.
- VON BAER, K. E. *Studien aus dem Gebiete der Naturwissenschaften.* 2 Theil. 1 Hälfte. St. Petersburg: Röttger.

History.

Clason's Continuation of Schwegler's History of Rome. [*A. Schwegler's Römische Geschichte, fortgeführt von Octavius Clason, erste Lieferung.*] Berlin: Calvary. 1873.

CLASON naturally begins his book with a summary of the results obtained by Nitsch, Nissen, and others, as to the authorities employed by Livy and Dionysius. The theory is that there were three main sources, Fabius Pictor, Valerius Antias, and Licinius Macer, and that Livy used all three, Dionysius only the two latter. Livy seems to use only one source at a time, Fabius Pictor down to 2.21, then to 3.5 alternating between Fabius and Valerius, while subsequently Macer is employed, who gave the cognomina of the magistrates, &c. The cognomina are a great test. Thus they are surprisingly frequent in Dionysius 5-9, while rare in the corresponding parts of Livy; reversely they are

frequent in Livy 3.6-4.7, and very rare in the corresponding part of Dionysius. It is obvious how valuable this inquiry is for the early Roman history, and this section of Clason's book is clear and good. He has barely begun the historical section of the work, on the events from the burning of the City by the Gauls to the struggle for the Licinian Laws. His chief contribution to the criticism of the history is a suggestion that the Roman statement about the Æquian and Volscian wars, viz. that the advancing Oscan tribes during sixty years conquered many Latin and Hernican towns, and that then the Roman confederacy re-conquered these places, such as Tibur and Praeneste, during the next sixty years (after the Decemvirate), was a Roman fiction to excuse the attack on the Æqui and Volsci; that the places conquered were originally Oscan, and only became Latin in consequence of the conquest. The view does not seem to be important, and contradicts not merely the historical account, but the traditions as to the founders of these places collected by Cato and other writers. It is true indeed that these traditions may not be of much value, but Clason sets a mere guess against them. Perhaps the tendency now is a little too much on the side of supposing that the later history of the Republic has thrown a colouring back over all early events. C. de Boor's valuable *Fasti Censorii* have lately shown that Mommsen is somewhat inaccurate in his account of the censorship. Mommsen thinks that the period of five years was assigned to the office in its earliest form, because five years was the period towards the end of the Republic; but de Boor shows from Cicero (*Ad Attic.* i. 18. 8, 4. 16. 14) that the censors then only held office for a year and a half. De Boor also shows that Schwegler's view of the fourth tribune (in the years when there are four military tribunes instead of three) exercising the censorial powers is untenable. C. W. BOASE.

Forbiger's Hellas and Rome. [*Hellas und Rom. Populäre Darstellung des öffentlichen und häuslichen Lebens der Griechen und Römer, von Dr. Albert Forbiger. Erste Abtheilung. Rom im Zeitalter der Antonine.*] Leipzig: Fues. 1871. 2 vols.

THE idea of illustrating the private life of the ancient nations by a fictitious narrative, which shall as it were give us admission to the domestic scenes, the every-day pursuits and lighter occupations of the two leading races of antiquity, whose external history we are in the habit of studying with such close attention, is not new. Possibly Montesquieu may have set the fashion in his *Lettres Persanes* in 1721, but his visitor was more of a Parisian than a Persian, and Goldsmith and other English Essayists, following his example, used their foreign travellers chiefly as a means of satirising the manners and views of their own age. Perhaps the first work of this kind which was really meant to illustrate ancient life was the *Athenian Letters*, to which Charles Yorke was the principal contributor, published at Cambridge in 1740. Cleander, an agent of the King of Persia, is supposed to be resident at Athens during the Peloponnesian war, and to carry on a correspondence, not only with his court, but with his brother living at home, and with private friends in Egypt and other provinces of the Persian Empire (see some extracts in Campbell's *Lives of the Chancellors*). Then we had the Abbé Barthélemy *Travels of Anacharsis*; and in more modern times Bulwer's *Last Days of Pompeii*, Lockhart's *Valerius*, the *Letters from Palmyra*, and other similar works have shown that a successful attempt to reproduce the life of the classical ages would be welcome. It remained for the Germans to attempt to combine the fictitious elements of a story with a series of appendices or short treatises which serve to condense the

mass of separate works in Graevius' *Antiquities*, "De re vestiaria," &c., into a more comprehensible form, while correcting and adding to them from the inscriptions and works of art since discovered. To this idea we owe Böttiger's *Sabina, or Morning Scenes at the Toilette of a rich Roman Lady*; and, above all, Becker's *Charicles and Gallus*, which represent to us Athens in the first period of the Macedonian supremacy, and Rome in the age of Augustus; both have been translated by Mr. Metcalfe. Dr. Forbiger in his present work intends to illustrate the middle age of the Empire, reserving his picture of Greek life for a later work, on the ground that modern readers are more interested in the culture and manner of life during a period so much nearer to us, and so much more closely resembling our own in its spirit and tone. He therefore gives us a journal of a Greek who travels to Rome in the time of Marcus Aurelius, and is promoted through the influence of kind friends to be a sort of cabinet secretary to the Emperor, with the function of reporting on the despatches from Greece and the East—there being a separate "procurator ab epistulis latinis." The first volume is taken up with the journey to Rome and the sights he saw there, while the second describes his official career and experiences. The author seems to feel that the mask is not very well kept on, and that the modern German is very visible through his Greek disguise; in such sections as that on the origin of the Roman religion we have a modern view, not an ancient. The book therefore essentially contains first a series of chapters written for the general public, and then a series of appendices intended for the more learned and critical student, the references to the notes of more general interest being pointed out to the former by thicker figures, while the indices make the whole work easy of consultation. The book is meant to be the closing work of Dr. Forbiger's literary efforts during the past half century, and he has accumulated a great mass of information in a very readable form. Still we cannot but feel that the double shape of the book is somewhat unfortunate, for the narrative part is not so lively as Becker's two stories (if the word "lively" can be used at all in such a connexion); and, when both text and appendix are so learned, it seems a pity to separate them and so cause a certain amount of repetition, while the turning backward and forward to look at the notes of course gives trouble. On the whole we much prefer the plan of such a book as Friedländer's *Sittengeschichte Roms*, where the whole description runs on smoothly and the notes are at the bottom of the page, only some discussions on literary or chronological points being reserved for separate consideration in appendices. This however is perhaps a matter of taste, and Dr. Forbiger's Greek friend is an interesting guide in our walks about Rome. He landed at Brundisium, and, after having his luggage examined by the custom-house officers, hired a carriage to take him to Rome. There his friend Sulpicius sends round a Greek freedman, Narcissus, to show him the sights, and hence we get a description of the streets, markets, baths, slave marts, &c., while Sulpicius' own house and household both in town and country are also described at length, and a sketch of Roman family life given. Of course our traveller is taken to see the theatre and circus games, and with them his leisurely tours of inspection come to an end, for at the beginning of the second volume he is employed in his public functions. This gives him an opportunity of describing the bureaucracy, the Emperor's triumph, the "Consecration" of Verus, the Emperor's adoptive brother; and this again leads to the question about the nature and influence of Roman religion, the state of art and science, and the condition of the industrial arts; and these last chapters are perhaps the most interesting part of

the whole. The free trade which prevailed throughout the Empire, and which modern Europe has not yet succeeded in restoring to anything like the same extent, allowed of a much greater concentration of all available materials for great works of architecture and art, while artists and artisans of all kinds were easily brought together. Hadrian's journeys of inspection through the Empire, accompanied as he was by a large staff of engineers, led to great public improvements. The reign of Marcus Aurelius is rightly selected by Dr. Forbiger as the point of time at which to describe the Empire, for after it art rapidly declined. Niebuhr has attributed the change to the dreadful plague, which Verus' army brought back, after conquering Seleucia from the Parthians. "The plague at Athens in the beginning of the Peloponnesian war forms a similar turning-point in the history of Attica; the Black Death in the year 1348 put a complete stop to early German literature, and the literature of Florence was manifestly affected in the same way. The ancient world never recovered from the blow inflicted upon it by the plague which visited it in the reign of Marcus Aurelius."

C. W. BOASE.

Unpublished Letters of Napoleon. [*Ungedruckte Briefe Napoleons aus den Jahren 1796 und 1797 im Besitze des Haus-Hof- und Staats-Archives in Wien.*] Von Dr. Hermann Hüffer. Wien: Gerold's Sohn.

DR. HÜFFER introduces these letters with an interesting sketch of the editions of Napoleon's correspondence hitherto published. Nothing gives us so vivid an impression of the great Emperor's personality as his letters; they will always be the chief authority for his history. A German professor at Würzburg, Fischer, was the first to publish a collection of them in 1808. Napoleon had himself taken great pains to keep copies of his correspondence, and from these MSS. the *Correspondance inédite* was published at Paris in seven volumes in 1819. It contained very many also of the letters sent to him, thus out of 744 pieces relating to the Italian campaign of 1796-7, only 250 are from Napoleon himself. The new collection, in twenty-eight volumes, published by a commission appointed by Napoleon III. in 1854, is very full in the early parts, but complaints have been made of suppressions in the later volumes. The principle of publishing only "what the Emperor would himself wish to make public if he were still alive" naturally led to some unfavourable parts of the correspondence being omitted; for instance, as d'Haussonville has pointed out, much of what concerns Napoleon's treatment of the Pope. Lanfrey makes similar complaints about political matters. The letters which Dr. Hüffer has extracted from the Austrian Record Office date from the summer of 1797, when Bonaparte was negotiating with Austria at Montebello, near Milan, the only time he acted in person as a diplomatist. The Austrian minister Thugut tried to protract the negotiations, and refused to ratify the preliminaries signed by his ambassadors. Bonaparte's first letter expresses his surprise at this want of good faith; and several despatches follow on small points. A letter to the Elector of Bavaria requests him to pay the war contribution which his ministers had promised to Moreau, but which he did not pay when fortune turned and Moreau had made his famous retreat through the Black Forest. At last the French plenipotentiaries sent an ultimatum to Vienna, and the Emperor made up his mind to empower Count Cobenzl to make peace in earnest. Even then the ambassadors could not agree, and Bonaparte sends a letter to the Austrian general in order to settle how to give due notice of resuming hostilities. The demand of the Ionian Islands for France seemed to destroy the last chance of peace, but Cobenzl now gave in.

Dr. Hüffer concludes his valuable pamphlet by pointing out some other letters, printed and unprinted, which have come under his notice in the course of his researches.

C. W. BOASE.

Notes and Intelligence.

Verfassung und Demokratie der Vereinigten Staaten von Amerika von Dr. H. v. Holst, a. ö. Professor an der Universität Strassburg. 1. Theil: *Staatsentstehung und Sklaverei* (Düsseldorf, 1873), is the first instalment of a probably extensive work on the constitutional politics of the United States. Its arrangement resembles in certain respects the writings of R. Gneist on administration and self-government in England. The author explains in the preface why he had to enlarge his original plan, a mere description of the present working of the constitution, by going back into the history of the constitutional law of the Union. He has done so most conscientiously, since the sifting of an enormous mass of printed matter was indispensable, before an impartial view of the historical development as well as of the opposing forces could have been obtained. By grappling with the mighty questions of state, and entering largely into their details, he introduces his readers to a vast amount of transatlantic official and party literature, only the smallest part of which has hitherto been noticed by European authors. Another storehouse is thus opened to the student of constitutional law and comparative politics in general. This first volume, however, furnishes mainly the internal history of the Union from its origin down to the compromise of 1833. Its component parts treat successively of the continuous struggles between confederate and federal principles, that of state-right and of central power. We have chapters about the Virginia and Kentucky resolutions, the presidential election in 1801 and Jefferson's policy, Madison and the second war with England, a history of slavery and of the abolition movement since 1789, of the doctrine of nullification, in fact of all the different phases of reaction against unity of legislation and executive government. Certainly a book like this could never have been written by an American. It will be the more interesting to observe by and by the reception accorded to it on the other side of the Atlantic.

Within the last few months three great collections of documents referring to the early history of certain North German cities, which were formerly important members of the Hanseatic league, have considerably advanced. Besides their municipal value, these works supply the sources for the study of civic law, of federal tendencies and commercial policy during the Middle Ages. Every one of these cities moreover appears to have had early intercourse with England, and many new documents bearing on this point are now printed for the first time. We mean: 1. *Codex Lubecensis, Urkundenbuch der Stadt Lübeck*, vol. iv., 1873, the continuation of a work begun thirty years ago, containing chiefly charters, statutes, and similar materials of the fourteenth century down to 1400; 2. *Bremisches Urkundenbuch im Auftrage des Senats der freien Hansestadt Bremen herausgegeben von D. R. Ehmck und W. v. Bippin*, vol. i., 1873, with the documents of this city down to 1300; 3. *Urkundenbuch der Stadt Braunschweig*. Vol. i.: *Statute und Rechtsbriefe 1297-1671 im Auftrage der Stadtbehörden herausgegeben von Ludwig Hänselmann, Stadtarchivar*, 1873.

A very valuable paper on Arnold of Brescia by W. v. Giesebrecht is printed in *Sitzungsberichte der philosophisch-philologischen und historischen Classe der k. b. Akademie der Wissenschaften zu München*, 1873, Heft i., p. 122. The learned historian communicates his discovery that the *Historia Pontificalis*, an original narrative of the twelfth century, printed for the first time from a MS. at Bern in Pertz *Scriptores*, vol. xx., p. 517, and giving a curious account of the life and times of Arnold, similar in many respects to that preserved in the *Gesta Friderici I.* by Bishop Otto of Freising, is the work of no less a contemporary than our own John of Salisbury.

The fourth number of the *History of the Franco-German War*, composed by the Prussian staff under the superintendence of Count Moltke, deals with no more than eight days, from August 7 to August 14, describing minutely the advance of the German armies toward the Moselle, the activity of their divisions of cavalry, and the battle fought on the 14th east of Metz, now called officially that of Colombey-Nouilly. A very extensive and most accurate plan is added to the text.

Contents of the Journals.

Literarisches Centralblatt, Sept. 20, praises Schiller's *Geschichte des römischen Kaiserreichs unter der Regierung des Nero* (though blaming the tone of contempt for the opposition to the Emperors, of which Adolf Stahr set the example); and Flathe's *History of Saxony from 1806 to 1866*.—A notice of Arnold Schaefer's *Essays* mentions the proof that the supposed treaty of 11th Jan., 1757, between England and Prussia is spurious.—Sept. 27 analyses Nohmann's and Baumbach's *Lives of Arnold von Selenhofen*, Archbishop of Mainz 1153-60 (these

archbishops were always important owing to their double position, as Metropolitans and Archchancellors of Germany); and praises two excellent manuals, Wattenbach's *Deutschland's Geschichtsquellen im Mittelalter*, and Richter's *Annalen der deutschen Geschichte im Mittelalter*.—Oct. 4 sums up the controversy on the unfortunate first volume of the *Diplomata Imperii* by the younger Pertz, and notices Meyer's edition of Radewicz's (perhaps the continuer of Otto of Freising) poem on Theophilus, one of the three forms in which the story of a compact with Satan appears, the other two being the legends of Anthemius, and of the servant of Proterius—the last was admirably versified by Southey, under the title of "All for love, or a sinner well saved."—Oct. 11 reviews Adolf Beer's instructive book on the First Partition of Poland, and San-Marte's translation of Wolfram von Eschenbach's Middle-high-German poem *Wilhelm von Orange*, in which the German writer surpassed the *Chanson de geste* which he copied.—Oct. 18 notices A. de Boor's *Fasti Censorii*, Krones' *Die österreichische Chronik Jacob Unrest's*, Hänselmann's *Urkundenbuch der Stadt Braunschweig*, Walther's *Die grosse Landgräfin Caroline von Hessen*, and Brandes' excellent *Lectures on Die Hauptströmungen der Literatur des neunzehnten Jahrhunderts*—which has just been reviewed in the *Revue des deux Mondes* at length.—Oct. 25 discusses Bayer's book on Aeneas Sylvius' *Historia Friderici III. Imperatoris*—a work still important; and the second part of Philippon's *Heinrich IV. und Philipp III., die Begründung des französischen Übergewichts in Europa 1598-1610*.—Wolzogen's translation of our famous Anglo-Saxon poem *Beowulf* is strongly commended.

Bullettino dell' Instituto di Corrispondenza Archeologica, Aug. and Sept., continues the account of the excavations at Capua and Chiusi, the latter supplying some small Etruscan inscriptions.—Some Laconian inscriptions follow, and a review is given of Benndorf's excellent work on the Metopes of Selinus.—Oct. describes the opening of twenty-five tombs at Ligurno, where many interesting objects were found, but no inscription.—Some more inscriptions from the Peloponnese follow, one of them written *boustrophedon*.—The discussion is continued on the name of the Roman colony in Africa, Tubusuctus, which Pliny calls Tubusuptus, and Tacitus Tubuscus; the discovery of an inscription has settled both the name and the locality.

Altpreussische Monatsschrift, neue Folge. Der neuen preussischen Provinzialblätter vierte Folge. July-Sept.—Boldt describes the contest between the Teutonic Order and the Lithuanians 1370-86, just before the marriage of the Lithuanian duke Jagellon with the heiress of Poland led to a concentration of hostile force, before which the Order gave way.—A description of an early round shield from the iron age follows, such as horsemen held in the left hand to parry blows, while the long shield was the foot-soldier's defence.—Rossberg prints the old Town-regulations of Saalfeld, as confirmed by Albert Margrave of Brandenburg in 1560; the arrangement is according to the penalties, given in schillings.—At the end of the number some original documents are printed, including a letter from Duke Julius of Brunswick to Albert Frederic of Prussia; one (in German) of Hochmeister Winrich von Kniprode in 1381 speaks of a successful campaign in Lithuania.

New Publications.

ANGEBERG, le Comte de. Autriche et Italie. Recueil des traités, conventions et actes diplomatiques concernant l'Autriche et l'Italie, depuis l'année 1703 jusqu'au commencement des hostilités (1859). Paris: Amyot.

ANGEBERG, le Comte de. Le Congrès de Vienne et les traités de 1815. Tomes 3 et 4. Paris: Amyot.

BAKER, H. B. French Society from the Fronde to the Great Revolution. Bentley.

BARROW, J. The Life of Peter the Great. Tegg.

BECKMANN, W. Die Gewerbe Mecklenburgs im 13. Jahrh. Rostock: Kuhn.

BEER, A. Friedrich II. und van Swieten. Berichte über die zwischen Oesterreich und Preussen geführten Verhandlungen die erste Theilung Polens betr. Leipzig: Duncker und Humblot.

BERNHEIM, E. Lothar III. und das Wormser Concordat. Strassburg: Trübner.

BRAY, Mrs. Joan of Arc and the Times of Charles VII. Griffith and Farran.

BUNGE, F. G. v. Liv-, est-, und curländisches Urkundenbuch, nebst Regesten. Riga: Kymmel.

CANEL, A. Recherches historiques sur les fous des rois de France, et accessoirement sur l'emploi du fou en général. Paris: Lemerre.

CHOISY, A. L'Art de bâtir chez les Romains. Paris: Ducher.

CHRONICA Monasterii Sancti Albani. Registra quorundam Abbatum Monasterii S. Albani, qui saeculo xv^{mo} floruerunt. Vol. ii. Registra Johannis Whethamstede, Willelmi Albon, et Willelmi Walingforde. Ed. H. T. Riley. Rolls Series. Longmans.

CUNNINGHAM, A. Archaeological Survey of India. Four Reports made during the years 1862-1865. Thacker.

- DROYSSEN, J. G. Geschichte der preussischen Politik. 5. Thl. Friedrich der Grosse. 1. Bd. Leipzig: Veit.
- FASELIUS, A. Altägyptische Kalenderstudien. Strassburg: Trübner.
- FRANÇOIS, L. v. Geschichte der preussischen Befreiungskriege in den J. 1813-1815. Berlin: Janke.
- "FRIENDS IN COUNCIL," Author of. Ivan de Biron; or, The Russian Court in the middle of the last Century. Isbister.
- GEORGE GROTE, the Minor Works of. With critical remarks on his intellectual character, writings, and speeches, by Alexander Bain. Murray.
- GFROERER, A. F. Byzantinische Geschichten. 2. Bd. Graz: Vereinsbuchdruckerei.
- GRIMM, A. Die Mecklenburgische Kirche unter Bischof Brunward (1192-1238). Rostock: Kuhn.
- HAMMARSTRAND, S. F. Attikas Verfassung zur Zeit des Königthums. Leipzig: Teubner.
- HUNDT, F. H. Ueber die bayerischen Urkunden aus der Zeit der Agilolfinger. München: Franz.
- JAEGER, A. Beiträge zur Geschichte der Verhandlungen über die erb-fällig gewordene gefürstete Grafschaft Tyrol nach dem Tode des Erzherzogs Ferdinand von 1595-1597. In Comm. Wien: Gerold's Sohn.
- KOHL, J. G. Die geographische Lage der Hauptstädte Europas. Leipzig: Veit.
- KOMOEDIANENTHUM, Das, in der Gesellschaft. Wien: Lechner.
- LA BORDERIE, A. de. Les Bretons insulaires et les Anglo-Saxons, du ^v^e au viii^e siècle. Paris: Didier.
- LANFREY, P. Histoire politique des papes. Nouvelle édition, revue et corrigée. Paris: Charpentier.
- LANGE, L. De ephetorum Atheniensium nomine. In Comm. Leipzig: Hinrichs.
- LEOTARD, A. Essai sur la condition des Barbares établis dans l'Empire romain au iv^e siècle. Paris: Franck.
- LESCURE de. Henri IV., 1553-1610. Paris: Ducrocq.
- LOISELLEUR, J. Ravaillac et ses complices. L'Evasion d'une Reine de France. La Mort de Gabrielle d'Estrées. Mazarin et le duc de Guise. Paris: Didier.
- MONUMENTA JURIDICA. The Black Book of the Admiralty. Appendix, part ii. Ed. Sir Travers Twiss. Rolls Series. Longmans.
- MUELLER, J. J. Studien zur Geschichte der römischen Kaiserzeit. Zürich: Schulthess.
- NOORDEN, C. v. Europäische Geschichte im 18. Jahrh. 1. Abth. Der spanische Erbfolgekrieg. Düsseldorf: Buddeus.
- NUMISMATIQUE de l'ancienne Afrique. Ouvrage préparé et commencé par C. T. Falbe et J. Chr. Lindberg, refait, achevé, et publié par L. Müller. Kjobnhavn: Høst.
- O'CURRY, Eugene. On the Manners and Customs of the Ancient Irish. Edited with Introduction, &c., by W. K. Sullivan. Williams & Norgate.
- PETERSDORFF, R. Beiträge zur Geschichte Alexander des Grossen. Berlin: Weber.
- PETIT, Prof. History of Mary Stuart, Queen of Scots. Translated from the original and unpublished MS. by Charles de Flandre. Longmans.
- PRUTZ, H. Kaiser Friedrich I. 3. Bd. 1177-1190. Danzig: Kase-mann.
- RECUEIL d'antiquités de la Scythie. Livr. 2. Leipzig: Voss.
- SACHAU, E. Zur Geschichte und Chronologie von Khwārizm. In Comm. Wien: Gerold's Sohn.
- STEIN. Res Syracusanae inde a morte Hieronis usque ad urbis expugnationem narratur atque illustrantur. Pars 2. Cöln: Schwann.
- VAN OUDEGEIN, J. J. de Geer. Archieven der Ridderlijke Duitsehe Orde, Balie van Utrecht. Utrecht: Kemink & Zoon.
- VOGEL, Th. Das Zeitalter der Entdeckungen 1440-1540. Bielefeld: Velhagen und Klasing.
- WALPOLE, Spencer. The Life of The Rt. Hon. Spencer Perceval. Hurst and Blackett.
- WILMANS, W. Die Reorganisation des Kurfürsten-Collegiums durch Otto IV. und Innocenz III. Berlin: Weidmann.
- ZIMMERMANN, M. Josef Süss Oppenheimer, ein Finanzmann des 18. Jahrh. Stuttgart: Rieger.

Philology.

The *Electra* of Sophocles. The Greek Text critically revised, with the aid of MSS. newly collated, and explained. By Rev. F. H. M. Blaydes, M.A. Williams and Norgate.

MR. BLAYDES' *Electra* of Sophocles differs not much in plan from his edition of the other plays. A superfluity of notes, and a restless desire to alter the text in numerous passages which appear to sober scholars perfectly sound, are the

general characteristics of this work, on which, it is evident, a great deal of thought and research has been bestowed. But Mr. Blaydes' poetical judgment seems sadly at fault; a scholar who still insists that such an alteration as that in *Oed. R.* 420,

βοῆς δὲ τῆς σῆς ποῦς οὐκ ἔσται ἁλικῶν (sic)

(i.e. ποῖος Ἐλικῶν), for ποῖος οὐκ ἔσται λιμὴν, is likely "to find favour among those who are best qualified to judge," or who is content with such a reading in *Electr.* 21 as ὦν ἐσμέν γ' ἵνα for ὡς ἐνταῦθ' ἐμὲν, and labours to defend the intolerable γε by two or three passages of an utterly different character, is not a safe guide in the art of classical criticism. If there is a verse in Sophocles, one would think, clear and unobjectionable, it is *El.* 27-8,

ὡσαύτως δὲ σὺ

ἡμᾶς τ' ὀτρύνεις καὶ τοὺς ἐν πρώτοις ἔπει.

"Thus you not only exhort and encourage us, but are among the first to accompany us."

The comment of the scholiast and the reading of one MS. show that there was an ancient variant, ἔση for ἔπη. Mr. Blaydes' note is as follows:—

"πᾶρει conj. P. Leopard. ἐν πρώτοις αἰ (or ἐν πρώτοις ἔτ' εἰ) conj. Nauck. Qu. πρόει, or ὑπεί (gl. πρόει, as we find ὑπάγειν explained by προάγειν, and ὑπάδδεν by προάδδεν). Or πέλει. Or ἄγεις. Or ἡμᾶς ὀτρύνεις αὐτοὺς ἐν πρώτοις αἰ (or φανείς, or ἰών, or ἐν πρώτοις αἰ ὦν). Schol. ἔπη. πρώτος ἔση διὰ τὴν ἀπὸ τοῦ γήρως εὐβουλίαν." Now, ὑπεί and πρόει (to say nothing of the strange forms) could not occur as present tenses in the early Attic of Sophocles, in which εἶμι always has a future sense, as μέτει in 430.

A more useful remark would have been, that this scholium shows, as many scholiasts' glosses do, that the scholia and the text were taken at some period of transcription from different MSS. This remark applies throughout to the scholia in the Medicean Aeschylus.

To revert briefly to the former passage (21), not only the epic form ἐμὲν for ἐσμέν, but the rare dual of the second person of the imperative, ξυνάπτετον, go far to show that this and the preceding verses are interpolations. The original text was probably this:

μέλαινα τ' ἄστρων ἐκλέλοιπεν εὐφρόνη

ὥστ' οὐκέτ' ὀκνεῖν καυρὸς, ἀλλ' ἔργων ἀκμή.

"The sable night has not a star left in the sky; so that 'tis no longer time for delay, but the moment for action."

The construction ἄστρων ἐκλέλοιπεν is peculiar, but appears to represent ἐλλιπής or ἐκλιπής ἔστιν. Mr. Blaydes' guesses, μέλαινα τ' ἄστρ' ἤδη λείλοιπεν εὐφρόνη, and μέλαινα τ' ἀστερῶν λείλοιπεν εὐφρόνη, are most unrhymical.

Another instance of interpolation is in *El.* 690-5, where the verses, full of faults as they are, both metrical and grammatical, were apparently introduced for the sake of the name Ὀρέστης. The last verse,

τοῦ τὸ κλεῶν Ἑλλάδος

Ἀγαμέμνονος στρατεύμ' ἀγέλαντος ποτε,

seems made up feebly from the first verse of the play,

ὦ τοῦ στρατηγῆσαντος ἐν Τροίᾳ ποτὲ

Ἀγαμέμνονος παῖ.

Mr. Blaydes adopts Porson's (or Blomfield's) emendation, ἀθλ' ἄπερ νομίζεται, for πεντάεθλ' ἃ νομίζεται. But this is a wrong use of the specific ἄπερ. It should have been ἃ ἐγ.

Another interpolation (probably), though one less obvious, is ver. 904, in which τοῦθ' ὄραν τεκμήριον comes very awkwardly after the mental sight of her brother suggested to Electra by the lock of hair she had found. The reading anciently was, it may be conjectured,

ἐμπάει τί μοι

ψυχῇ ξύνηθες ὅμμα φιλάτου βροτῶν,

"There suddenly strikes on my soul the familiar aspect of one most dear to me of living men."

Again to bring in the name of her brother some interpolator added,

πάντων Ὁρέστου τοῦθ' ὄραν τεκμήριον.

An example of an alteration which can be shown to be almost certainly wrong is Mr. Blaydes' substitution of λέβητι for μέγιστον in 758,

καὶ νῦν (νῦν?) πυρρὴ κέαρτες εὐθὺς ἐν βραχεὶ
χαλκῷ μέγιστον σῶμα δειδαίας σποδοῦ
φέρουσιν ἄνδρες, &c.

Mr. Blaydes chooses to read on mere conjecture ἐνθίντες βραχεὶ χαλκῷ λέβητι, which is simply a wilful corruption of the text of Sophocles. The remark in his Appendix (p. 305), "I do not think there is any antithesis intended between μέγιστον and βραχεὶ," while it suggests the suspicion of an after-thought, would hardly have been made had he remembered the exactly parallel lines in Propertius, who beautifully says in describing the grief of Briseis for Achilles (ii. 9. 9),

"Foedavitque comas, et tanti corpus Achilli
Maximaque in parva sustulit ossa manu."

"She raised in her little hand the huge bones of her hero," i.e. pieces of the burnt bone."

In the well-known passage (780)

ὦστ' οὔτε νυκτὸς ὄππῃ οὐτ' ἐξ ἡμέρας
ἐμὲ στεγάζειν ἤδον,

without mentioning the almost certain correction ὕπνος—ἐμ' ἐστέγαζεν ἡδὺν, by which the difficulty of οὔτε with an infinitive is avoided with scarcely any alteration of the words, Mr. Blaydes merely says στεγάζειν is "an unusual expression," and reads in his text ἐμοὶ πελάζειν, which he calls "highly probable." Of course, that is a matter of opinion. Can he say that ὕπνος ἐμοὶ πελάζει is a usual expression?

The difficult passage in 451, where τήνδ' ἀλιπαρὴ τρίχα is used when λιπαρὰν, "glossy," was rather to be expected (and where the long ι in λιπαρῆς admits of no safe explanation except that the verse was due to the blundering of an interpolator who confounded λιπαρῆς with λιπαρὸς), is dismissed by Mr. Blaydes with the following series of conjectures:—
"Qu. τήνδε γ' ἀλιπαρον τρίχα. Or τήνδ' ἀλιπαρον δὴ τρίχα. Or τήνδε νεοκαρῇ (or νεοκυρτον) τρίχα. Or τήνδε κακοπινῇ (cf. Aj. 381) τρίχα. Or τήνδε πιναρὰν δὴ τρίχα. Or τήνδ' ἀνηλιφῇ τρίχα." (My own view of this passage is given in the *Journal of Philology*, vol. v., No. 9, p. 90.)

Surely this system of firing random shots is something very different from the art of a critic. It is impossible to put any, even the slightest, faith in any one of such guesses. What possible value then can they have? So much pains and so much ingenuity would produce better results if directed by a sounder judgment and truer poetical feeling for iambic composition—a faculty that probably can only be acquired by the successful practice of verse-composition in earlier life.

F. A. PALEY.

Paul and Braune on the History of the German Language and Literature. [*Beiträge zur Geschichte der Deutschen Sprache und Literatur*, hrsg. von H. Paul und W. Braune. 1. Band. 1. Heft.] Halle: Lippert.

FIRST in place, and perhaps also in value, comes an essay by W. Braune, "Zur Kenntniss des Fränkischen und zur Hochdeutschen Lautverschiebung." He divides the Frankish dialect into three groups, Upper, Middle, and Low-Frankish. It is with the second of these groups (commonly called Niederrheinisch) that the essay is most immediately concerned. It extends, roughly speaking, from the Mosel to Düsseldorf, including Trèves, Cologne and Aix-la-Chapelle, and is characterized by the retention of the neuter ending *t* in *dat*, *wat*, &c., while otherwise *t* has been regularly "verschoben" to *s*. It is thus sharply marked off from the Upper-Frankish on the one hand, in which the *s*-change is carried out everywhere, and the Low-Frankish on the other, where the change of *t* into *s* has not been developed at all.

The proofs are drawn partly from the living dialects, partly from the older charters: it is shown that the distinctive features of the middle dialect were fully developed in the 13th century, and that it was spoken in the same localities as it is now. Braune has rendered an important service to philology by his refutation of the current hypothesis which explains the High-German forms in the Middle-German dialects as the result of the literary and social preponderance of the High-German dialects. He shows clearly that the imperfectly carried out *lautverschiebung* of the Middle-Frankish—and, to a less extent, of Frankish generally,—is quite as independent a phenomenon as the more advanced changes that characterize the Alemannic dialects. The peculiarities of Middle-Frankish are, in short, as old as the 3rd *lautverschiebung* itself. Braune agrees with Scherer in considering the change of *t*, &c., into *s*, &c., as the first and most characteristic change: he considers that the change of *th* (dh) into *d* is later and of secondary importance. We cannot follow the details of his chronological investigations, but must content ourselves with calling attention to the great clearness and precision with which he treats the phonetic side of the question, contrasting favourably with the pretentious mysticism in which many German philologists have veiled it.

The *lautverschiebung* is also treated of by H. Paul in the last essay in the volume, "Zur Lautverschiebung," but from a less objective and more conjectural point of view than Braune's. Paul starts, for instance, with the hypothesis that Gothic *b*, &c., was pronounced *v*, based on the Byzantine pronunciation of *β*, although it certainly seems rather strange that the fact of such a change having taken place in Byzantine Greek should have debarred the Goths from all means of representing the sound of hard *b*. Runic are much more probable than Greek analogies in such cases. A great part of the essay is taken up in adducing cases in support of the change of (v) &c. into the corresponding stops, a change, which it seems, is still looked upon with distrust in Germany. All this is good and sound. So also is the proof of the untenability of the common hypothesis that *þ* or *th* was ever a true aspirate (tʰ), and the remarks on the antiquity of the voiced pronunciation of medial and final *f* in the Northern languages. Paul's theory of the development of *þ*, &c., is, then, briefly this: *t* was changed directly into (th) the sibilant, (th) became vocal (dh), first medially, and then (in some dialects) initially. The sibilant, lastly, was converted into a stop. All this is phonetically possible, although, as Paul himself confesses, there are no instances known of (t) becoming directly (th), but it is in direct opposition to known facts. An impartial review of the pronunciation of the living, and the spelling of the dead Teutonic languages, shows clearly that the vocal pronunciation is the oldest in all the languages, and that (d) is older than (dh), except of course where, as in modern Dutch and German, the (dh) has, at a comparatively late period, changed into the voiced stop from which it arose. The only tenable hypothesis is the one advanced by me in the appendix to my edition of the Old English *Pastoral Care*, in which I have also anticipated Paul in denying that *þ* ever was a true aspirate.

Of special interest for English scholars is R. Wülcker's "Übersicht der Neuangelsächsischen Sprachdenkmäler," in which he gives a full list of all the known Semi-saxon texts, with an account of their age, linguistic character and editions. The essay is not merely a useful summary of what is already known, but also contains a good deal of original criticism.

The two remaining essays, "Legenden und Sagen von Pilatus" by W. Creizenach, and "Über die Letanie" by F. Vogt, are of no general interest for English readers.

HENRY SWEET.

Contents of the Journals.

Archæologia Cambrensis, October, 1873.—Chevalier Lloyd: History of the Lordship of Maelor Gymraeg or Bromfield (continued). [This like the previous instalments is rich in Welsh proper names.]—Ernest Hartland: Notes on a Radnorshire cross [in Llowes churchyard. The suggestion that interlaced ornaments in compartments are often to be found on stones bearing inscriptions in the Romano-British character is unwarranted.]—M. H. Bloxam: Beaumaris church. [The writer finds that the earliest Christian structure now existing in Wales is to be seen in Puffin Island.]—Henry G. Bull: The discovery of some remains of the ancient chapel in the Forest of Deerfold.—James Davies: Wapley Camp and its Connexion with the resistance of Caractacus to the Romans.—E. L. Barnwell: Unexplained Stone Articles.—John Rhys: Welsh words borrowed from Latin, Greek, and Hebrew (continued).—D. R. Thomas: Monachi di Mochrader. [The writer identifies Mochrader with Bochradiadr, near Bala.]—E. L. Barnwell: On "The Nevern Rock-Cross" [cut in the face of the rock with a corresponding hollow below, cut out to serve as a kneeling-place; it is unique in Wales and stands on the pilgrims' route from Holywell to St. David's], and on a "Grave in Wenlock Abbey" [the method of burial and the accompanying pottery are enigmatical].—Llallawg: Want of accuracy in Welsh Books.. [The writer gives instances, to which many more might easily be added.]—John Rhys: Inscribed Stones of Wales. [Refutes Brash's Irish claim to them and gives revised readings of several of them.]—Howel W. Lloyd: Gwytheriac Nunnery. [Inclines apparently to locate it at Gwytherin.]—The same: Welsh words derived from Latin. [This is a protest based on bad philology against Rhys' list.]—Celtic Remains and Original Documents continued.

Notes and Intelligence.

A correspondent writes:—In the *Academy*, No. 83, Nov. 1, 1873, p. 419, "The Annals of the Bamboo Books," the following remark is quoted from Mr. Holt: "Nor is it a fact of common interest to know that to *this very day* the Virgin Mary is honoured in the Basque Provinces under the name of Astarte." I cannot find this exact word in the Dictionaries of the French-Basque, but it may exist in the Spanish dialects—Ast-arte, and is probably one of the many derivatives of "arte" p. between, s. space between two things. Thus arte-ko-a, ar-arte-ko-a, "the Mediatrix," is often applied to the Virgin. Astarte in Basque would thus have nothing to do with Ishtar or Astarte, Queen of the Stars.

New Publications.

- ÆSCHYLOS.** Die Oresteia, Agamemnon, Choephoren, Eumeniden. Deutsche Nachdichtg. und Erklärung von O. Marbach. Leipzig: Naumann.
- BAEHRENS, Aem.** De Sulpiciae quae vocatur satira commentatio philologica. Jena: Frommann.
- BOEMER, E.** Romanische Studien. 3. Hft. Strassburg: Trübner.
- CALLIMACHEA**, ed O. Schneider. Vol. ii. Leipzig: Teubner.
- HAIEVY, J.** Essai sur la langue Agau. Le dialecte des Talachas (Juifs d'Abyssinie). Paris: Maisonneuve.
- HERTZ, M.** Vindiciae Gellianae alterae. Leipzig: Teubner.
- LASSEN, C.** Indische Alterthumskunde. 2. Bd. Geschichte von Buddha. 2. verm. u. verb. Auflage. Leipzig: Kittler.
- LEHRS, K.** Die Pindaerscholien. Eine krit. Untersuchg. zur philolog. Quellenkunde. Leipzig: Hirzel.
- LELAND, C. G.** The English Gypsies and their Language. Trübner.
- LENORMANT, J.** Essai sur la propagation de l'alphabet phénicien dans l'ancien monde. 1873. Tome ii. Première livraison (contenant les alphabets syriaques, tartares, sabien ou mendaïte, auranitique, nabatéen et arabe). Paris: Maisonneuve.
- NESELMANN, G. H. F.** Thesaurus linguae Prussicae. Der preuss. Vocabellvorrath, soweit derselbe bis jetzt ermittelt worden ist. Berlin: Dümmler.
- PETERMANN, J. H.** Brevis linguae samaritanæ grammatica, litteratura, chrestomathia, cum glossario. Berlin: Eichler.
- PETSCHEG, M.** Zu den Scholiasten des Horaz. In Comm. Graz: Leuschner und Lubensky.
- RICHTER, E. A.** Kritische Untersuchungen über die Interpolationen in den Schriften Xenophons, vorzugsweise der Anabasis und den Hellenicis. Leipzig: Teubner.
- SCHOTT, W.** Zur Literatur des chinesischen Buddhismus. In Comm. Berlin: Dümmler.
- THAUEN, Ph. de.** Licumpoz. Der Computus des Phpp. von Thain, m. e. Einleitung über die Sprache des Autors hrsg. von Dr. E. Mall. Strassburg: Trübner.
- VAN EYS, W. T.** Dictionnaire basque-français. Paris: Maisonneuve.
- V., J. F.** Précis de grammaire polynésienne, précédé d'une considération sur la nature des langues polynésiennes. Paris: Maisonneuve.
- WEBER, A.** Indische Studien. Bd. xi. Leipzig: Brockhaus.

WEEKLY ISSUE OF THE ACADEMY.

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THE following are the Dates at which the several EXAMINATIONS in the UNIVERSITY OF LONDON for the year 1874 will commence:—

Matriculation.—Monday January 12, and Monday June 29.

Bachelor of Arts.—First B.A., Monday July 20.

Second B.A., Monday October 26.

Master of Arts.—Branch I., Monday June 1; Branch II., Monday June 8; Branch III., Monday June 15.

Doctor of Literature.—First D.Lit., Monday June 1.

Second D.Lit., Tuesday October 13.

Scriptural Examinations.—Tuesday November 24.

Bachelor of Science.—First B.Sc., Monday July 20.

Second B.Sc., Monday October 26.

Doctor of Science.—Within the first twenty-one days of June.

Bachelor of Laws.—First LL.B. } Thursday January 8.
Second LL.B. }

Doctor of Laws.—Thursday January 15.

Bachelor of Medicine.—Preliminary Scientific, Monday July 20.

First M.B., Monday July 27.

Second M.B., Monday November 2.

Bachelor of Surgery.—Tuesday November 24.

Master in Surgery.—Monday November 23.

Doctor of Medicine.—Monday November 23.

Examination for Women.—Monday May 4.

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WILLIAM B. CARPENTER, M.D.,

Registrar.

December 10, 1873.

